

Checklist for Phase I Site Assessments Conducted using EPA Brownfields Assessment Grant Funds

Contact Information

Grantee Name: Oakland County Michigan

Grant Number: BF00E02004

ACRES Property ID: 235561

Program Manager Name: Bradley Hansen
(Point of Contact)

Contact Phone Number: 248-858-8073

Name / Address of Property Assessed: 28016 Oakland Oaks Court, Wixom, Michigan

Checklist

Please indicate that each of the following All Appropriate Inquiries documentation requirements were met for the Phase I assessment conducted at the above listed property:

- ☐ An ***opinion*** as to whether the inquiry has identified conditions indicative of releases or threatened releases of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products, or controlled substances, on, at, in, or to the subject property.
- ☐ An identification of ***“significant” data gaps*** (as defined in §312.10 of AAI final rule and §12.7 of ASTM E1527-05), if any, in the information collected for the inquiry, as well as comments regarding the significance of these data gaps. Significant data gaps including missing and unattainable information that affects the ability of the environmental professional to identify conditions indicative of releases or threatened releases of hazardous substances, and as applicable, pollutants and contaminants, petroleum or petroleum products, or controlled substances, on, at, in, or to the subject property.
- ☐ ***Qualifications and signature*** of the environmental professional(s). The environmental professional must place the following statements in the document and sign the document:
 - ☐ “[I, We] declare that, to the best of [my, our] professional knowledge and belief, [I, we] meet the definition of Environmental Professional as defined in §312.10 of this part.”
 - ☐ “[I, We] have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. [I, We] have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.”

Note: Please use either “I” or “We.”
- ☐ In compliance with §312.31(b) of the AAI final rule and §12.6.1 of ASTM E1527-05, the environmental professional must include in the final report an ***opinion regarding additional appropriate investigation***, if the environmental professional has such an opinion.

Signature of Grantee Program Manager

Date



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PHASE I ENVIRONMENTAL SITE ASSESSMENT

28016 Oakland Oaks Court | Wixom, Michigan
PM Project Number 01-9074-0-0001

Prepared for:

Oakland County
2100 Pontiac Lake Road
Pontiac, Michigan 48328-2735

Prepared by:

PM Environmental, Inc.
4080 West Eleven Mile Road
Berkley, Michigan 48072

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November 9, 2017

Mr. Dan Hunter
Oakland County
2100 Pontiac Lake Road
Pontiac, Michigan 48328-2735

**Re: Phase I Environmental Site Assessment of the Light Industrial Property
Located at 28016 Oakland Oaks Court, Wixom, Michigan
PM Environmental, Inc. Project No. 01-9074-0-0001**

Dear Mr. Hunter:

PM Environmental, Incorporated (PM) has completed the Phase I Environmental Site Assessment (ESA) of the above referenced property. This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-13* (ASTM Standard Practice E 1527-13).

The Phase I ESA for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for **HOSCO INVESTMENTS LLC AND OAKLAND COUNTY** to rely on PM's Phase I ESA report.

If you have any questions related to this report please do not hesitate to contact our office at 248.336.9988.

Sincerely,
PM ENVIRONMENTAL, INC.

Christopher Johnstone
Staff Consultant

Kevin M. Kruszewski, P.G.
V.P. – Environmental Risk Management

EXECUTIVE SUMMARY

PM Environmental, Inc., (PM) was retained to conduct a Phase I Environmental Site Assessment (ESA) of the Light Industrial Property located at 28016 Oakland Oaks Court, Wixom, Oakland County, Michigan (hereafter referred to as the "subject property"). This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-13* (ASTM Standard Practice E 1527-13).

THIS REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF HOSCO INVESTMENTS LLC AND OAKLAND COUNTY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

Item	Comments
Number of Parcels and Acreage	One parcel containing 1.07 acres
Number of Building(s) and Square Footage	One single-story light industrial building containing 16,306 square feet
Current Property Use	The building is currently vacant of occupants; therefore, there are no current business operations

Reasonably ascertainable records for the subject property extended back to approximately 1940. Data failure occurred prior to that date. However, PM did not identify any significant data gaps during the completion of this Phase I ESA.

Standard and other historical sources were able to document the subject property was developed prior to 1940 with an orchard. The orchard operations ceased in the late 1980s, and the current light industrial building was constructed in 1989. The building was occupied by an automobile parts testing company, Kelsey-Hayes/TRW, from at least 1995 until at least 2004 and was vacant from at least 2007 until at least 2011. Fleet Service, an automobile parts storage company, occupied the building in at least 2014. The building was most recently occupied by SurClean, Inc., a laser coating removal company. According to site contacts and the company website, SurClean, Inc. did not conduct chemical stripping, media blasting, or use abrasives. Therefore, PM has not identified the former laser coating removal operations as a REC. SurClean, Inc. occupied by the building from 2016 until the fall of 2017 when the building became vacant.

The following table summarizes the conditions identified as part of this assessment.

Type of Condition	Identified During the Course of this Assessment
De Minimis Condition	No
Significant Data Gap	No
Historical Recognized Environmental Condition (HREC)	No
Recognized Environmental Condition (REC)	No
Controlled Recognized Environmental Condition (CREC)	No
Significant Non-ASTM Scope Considerations and/or Business Environmental Risks	No

Recommendations

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Light Industrial Property located at 28016 Oakland Oaks Court, Wixom, Oakland County, Michigan, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property. No further investigation is recommended.

The summary presented above is general in nature and should not be considered apart from the entire text of the report, which contains the qualifications, considerations and subject property details mentioned herein. Details of findings and conclusions are elaborated upon in this report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at 248.336.9988 to discuss this report.

REPORT PREPARED BY:
PM Environmental, Inc.



Christopher Johnstone
Staff Consultant

REPORT REVIEWED BY:
PM Environmental, Inc.



Kristin Gable
Regional Due Diligence Manager



Kevin M. Kruszewski, P.G.
V.P. – Environmental Risk Management

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Figure 1: Site Location Map

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APPENDICES

Appendix A: Property Photographs from Site Reconnaissance

Appendix B: Correspondence and Supporting Documentation

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and User's Continuing Obligations under CERCLA

1.0 INTRODUCTION

This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-13* (ASTM Standard Practice E 1527-13).

THIS REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF HOSCO INVESTMENTS LLC AND OAKLAND COUNTY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

PM acknowledges that these parties may rely on the contents and conclusions presented in this report. Unless stated otherwise in writing, PM makes no other warranty, representation, or extension of reliance upon the findings of this report to any other entity or third party.

1.1: Property Overview

Subject Property Location/Address	28016 Oakland Oaks Court, Wixom, Oakland County, Michigan
Number of Parcels and Acreage	One parcel containing 1.07 acres
Number of Building(s) and Square Footage	One single-story light industrial building containing 16,306 square feet
Current Property Use	The building is currently vacant of occupants; therefore, there are no current business operations
Current Zoning	IRO: Industrial Research Office

The subject property location is depicted on Figure 1, Site Location Map. A diagram of the subject property and adjoining properties is included as Figure 2, Generalized Diagram of the Subject Property and Adjoining Properties. Photographs taken during the site reconnaissance are included in Appendix A.

1.2: Purpose and Scope of Services

The purpose of this Phase I ESA was to evaluate the current and historical conditions of the subject property in an effort to identify *recognized environmental conditions* (RECs), *controlled recognized environmental conditions* (CRECs), and *historical recognized environmental conditions* (HRECs) in connection with the subject property. This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs, CRECs, and HRECs in connection with the subject property.

Acronyms and terms used in this report are described in Appendix F. Additionally, PM's scope of services is included in Appendix F.

1.3: Significant Assumptions

Pursuant to ASTM Standard Practice E 1527-13, PM assumes that the information provided by all sources and parties, including the User, is accurate and complete, except where obvious inconsistencies or inaccuracies were identified.

1.4: Limitations, Deviations, and Special Terms and Conditions

There are no deviations from the ASTM Standard. Non-ASTM Scope considerations are included in Section 11.0. Any physical limitations identified during the completion of this report are referenced in Section 7.0.

Due to changing environmental regulatory conditions and potential on-site or adjacent activities occurring after this assessment, the client may not presume the continuing applicability to the subject property of the conclusions in this assessment for more than 180 days after the report's issuance date, per ASTM Standard Practice E 1527-13.

To the best of PM's knowledge, no special terms or conditions apply to the preparation of this Phase I ESA that would deviate the scope of work from the ASTM Standard Practice E 1527-13.

PM was not provided with a copy of the recorded land title records for subject property by the client and was not requested to complete a title search. Therefore, PM cannot comment on any potential relevant information that may have been obtained through review of these records.

2.0 USER PROVIDED INFORMATION

The ASTM Standard defines a User as "the party seeking to use Practice E 1527 to complete an environmental site assessment. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager." The User has specific obligations for completing a successful application of this practice as outlined in Section 6 of the ASTM Standard Practice E 1527-13.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments") (if desired), the User must provide certain information (if available) identified in the User Questionnaire to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

The following responses were provided by the User. A copy of the completed User Questionnaire is included in Appendix B.

Question	Response
Name of Preparer and User Entity	Mr. Thomas Murray; Hosco Investments LLC
Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?	No
Are you aware of any Activity and Use Limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?	No

Question	Response
As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	Yes; performed Phase I and Phase II for same property in 2012. No potential change since then. <i>Refer to Section 4.9 for a summary of the previous site investigations.</i>
Does the purchase price being paid for this property reasonably reflect the fair market value of the property?	Yes
If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?	Not Applicable
Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user:	
Do you know the past uses of the property?	Yes; light industrial, very clean, Phase I and II in 2012 were clean <i>Refer to Section 4.9 for a summary of the previous site investigations.</i>
Do you know of specific chemicals that are present or once were present at the property?	No
Do you know of spills or other chemical releases that have taken place at the property?	No
Do you know of any environmental cleanups that have taken place at the property?	No
As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?	No

2.1: Recorded Land Title Records

PM was not provided with land title records for the subject property by the User and was not requested to complete a chain of title for the subject property. PM reviewed reasonably ascertainable environmental liens and activity and use limitation documents, which are further discussed in Section 4.10. Based upon the information reviewed as part of this Phase I ESA, PM has not identified the lack of provided land title records as a data failure that represents a significant data gap.

2.2: Reason for Performing this Phase I ESA

According to the User, this Phase I ESA was conducted as part of environmental due diligence related to purchasing the subject property.

3.0 PHYSICAL SETTING

PHYSICAL SETTING INFORMATION FOR THE SUBJECT PROPERTY AND SURROUNDING AREA		SOURCE
Topography: Refer to Figure 1 for an excerpt of the Topographic Map		
<i>Site Elevation</i>	960 feet above mean sea level (msl)	United States Geological

PHYSICAL SETTING INFORMATION FOR THE SUBJECT PROPERTY AND SURROUNDING AREA		SOURCE
Topographic Gradient	North-northwest	Survey Division (U.S.G.S.) 7.5-Minute Topographic Map of the Salem, Michigan Quadrangle, 1967 (photo revised in 1983)
Closest Surface Water	An unnamed pond located approximately 350 feet southwest of the subject property at an elevation 920 feet above msl and Norton Creek located approximately 5,000 feet north-northwest at an elevation of 920 feet above msl.	
General Soil Characteristics: Refer to Appendix B for a copy of the soil survey map and soil type descriptions		
Soil Type	Brookston and Colwood loams	United States Department of Agriculture, Custom Soil Survey of Oakland County, Michigan (survey area data: February 13, 2017)
Description	<p>A Brookston soil profile consists of loam to 16.0 inches below ground surface (bgs), clay loam to 36.0 inches bgs, underlain by loam to 60.0 inches bgs. Soils are very poorly darined. Risk of corrosion is high for uncoated steel and low for concrete.</p> <p>A Colwood soil profile consists of loam to 11.0 inches bgs, silty clay loam to 37.0 inches bgs, underlain by stratified fine sand to silt loam to 60.0 inches bgs. Soils are poorly drained. Risk of corrosion is high for uncoated steel and low for concrete.</p>	
Soil Type	Marlette sandy loam, 1 to 6 percent slopes	
Description	A typical soil profile consists of sandy loam to 8.0 inches bgs, loam to 22.0 inches bgs, clay loam to 31.0 inches bgs, underlain by loam to 60.0 inches bgs. Soils are well drained. Risk of corrosion is high for uncoated steel and low for concrete.	
Area Specific Geology/Hydrogeology Characteristics:		
Geology	Geology consists of medium dense clay to a depth of 6.0 feet bgs, the maximum depth explored.	Previous site investigations for the north adjoining property (November 2011)
Hydrogeology	No groundwater was encountered in the maximum depth of 6.0 feet bgs.	
Oil and Gas Wells:		
Current Oil and Gas Wells on Subject Property	None identified	MDEQ Geologic Survey Division (GSD) web site
Historical Oil and Gas Wells On Subject property	Non identified	

4.0 RECORDS REVIEW

PM reviewed reasonably ascertainable records to identify obvious uses of the subject property from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. Reasonably ascertainable records reviewed as part of this Phase I ESA documented the use of the property back to 1940. Data failure occurred prior to that date. In PM's professional opinion, this data failure does not represent a significant data gap.

4.1: Aerial Photographs and Sanborn Maps

PM reviewed reasonably ascertainable aerial photographs for the subject property area. The sources and years reviewed are identified in the table below. Relevant aerial photographs are included in Appendix B.

PM attempted to review reasonably ascertainable Sanborn Fire Insurance Maps for the subject property. However, no Sanborn Fire Insurance Maps were available for the subject property.

The following table summarizes the sources reviewed and the information obtained about the subject property from these sources. Information obtained about the adjoining properties from these sources is summarized in Section 8.0.

Aerial and Summary for the Subject Property

Year and Source	Summary of Information
1940 Aerial (Oakland County)	Property appears to be developed with an orchard based on well-defined tree rows.
1949 Aerial (WSU)	Similar to the previous aerial year.
1956 Aerial (WSU)	Similar to the previous aerial year.
1961 Aerial (SEMCOG)	Similar to the previous aerial year.
1963 Aerial (Oakland County)	Similar to the previous aerial year.
1967 Aerial (WSU)	Similar to the previous aerial year.
1970 Aerial (SEMCOG)	Similar to the previous aerial year.
1974 Aerial (Oakland County)	Similar to the previous aerial year.
1980 Aerial (Oakland County)	Similar to the previous aerial year.
1983 Aerial (MSU)	Similar to the previous aerial year.
1990 Aerial (Oakland County)	Property has been developed with the current building and associated parking lot. Similar to the current layout.
1994 Aerial (MSU)	Similar to the previous aerial year.
1997 Aerial (Oakland County)	Similar to the previous aerial year.
2000 Aerial (Oakland County)	Similar to the previous aerial year.

Year and Source	Summary of Information
2005 Aerial (Oakland County)	Similar to the previous aerial year.
2010 Aerial (Oakland County)	Similar to the previous aerial year.
2015 Aerial (Oakland County)	Similar to the previous aerial year.

A summary of this information along with other historical sources is included in Section 6.0.

4.2: Local Street Directories

Reasonably ascertainable local street directories for Wixom, Michigan were researched. Directories were available from 1957 to 2014. Directories were researched in at least five-year increments, when available. It should not be construed that the earliest date represented is the initial date of occupancy.

Subject Property: 28016 Oakland Oaks Court

2014	Fleet Service Corporation
2011-2010	Not Listed
2007	XXXX (Building present, no occupants noted)
2004	Bruce Conlon
2001-1995	Kelsey Hayes
1992-1991	Not Listed
1989-1957	Street Not Listed

A summary of this information along with other historical sources is included in Section 6.0.

PM also reviewed listings for adjoining commercial properties. Information from the listings reviewed is included in Section 8.0.

4.3: Assessing Department

Reasonably ascertainable assessment information provided by the Oakland County Equalization Department was obtained and reviewed. Assessing records document that the subject property consists of one parcel containing 1.07 acres and developed with a 16,306 square foot light industrial building constructed in 1989. PM reviewed historical record cards, which document similar information as the current assessing card for the subject property. Copies of available assessment records for the subject property and the current legal description are included in Appendix B.

4.4: Building Department

Reasonably ascertainable assessment information provided by the City of Wixom Building Department was obtained and reviewed. The permits for the subject property included documentation of municipal water and sewer connection dates in 1989 as well as the original building permit to construct the current light industrial building. PM's review did not identify potential environmental concerns associated with the subject property.

4.5: Fire Department

PM submitted a Freedom of Information Act (FOIA) request to the City of Wixom Fire Department to review records for the subject property. PM received a written response indicating there are no records of incidents of fires, chemical spills, dumping, or HAZMAT responses to the subject property.

4.6: Health Department

PM submitted a FOIA request to the Oakland County Environmental Health Division to review records for the subject property. PM received a written response from a representative of the department indicating no files were available for the subject property.

4.7: Utilities

4.7.1: Municipal Water/Water Wells

The subject property is currently connected to municipal water. PM reviewed water connection permits provided by the City of Wixom Building Department, which indicated the subject property was connected to municipal water in 1989, which is consistent with the construction of the current building at the subject property. No records of private water wells have been identified through review of reasonably ascertainable information.

4.7.2: Sanitary Sewer/Septic System

The subject property is currently connected to municipal sewer. PM reviewed sewer connection permits provided by the City of Wixom Building Department, which indicated the subject property was connected to municipal sewer in 1989, which is consistent with the construction of the current building at the subject property. No records of private septic fields have been identified through review of reasonably ascertainable information.

4.7.3: Heat Source

The subject property is connected to natural gas, which is supplied by Consumers Energy. Review of the Consumers Energy SIMS website indicates the subject property was initially connected to natural gas in 1989, which is consistent with the initial construction of the current building. No alternative heat sources have been identified through review of reasonably ascertainable information.

4.8: Underground Storage Tank (UST) Systems

Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current and historical presence of USTs on the subject property. Specifically, no records of USTs were identified through review of reasonably ascertainable records and PM did not observe any evidence of USTs (i.e. fill ports, vent pipes, etc.) during the site reconnaissance. Additionally, the current owner indicated he had no knowledge of USTs associated with the subject property.

4.9: Previous Environmental Reports

PM completed a Phase I ESA for the subject property and north adjoining property in September 2011. The previous Phase I ESA documented similar historical information included in this report. The Phase I ESA identified the former orchard at the current subject property and north adjoining property as a REC.

PM completed a Phase II ESA at the north adjoining property in November 2011, which included the advancement of four soil borings north of the subject property. Soil samples were analyzed for arsenic and lead, which were below the Statewide Default Background Levels (SDBLs), regional background levels, and/or applicable MDEQ Part 201 Cleanup Criteria. PM concluded that the concentrations were representative of background levels and within a range that was under consideration for background levels in this region of Michigan. No further investigation was recommended.

Although no assessment was conducted on the current subject property, PM expects similar concentrations on the subject property. Additionally, the normal use and application of agricultural chemicals generally does not trigger enforcement actions, assessments by regulatory agencies, or the recommendation for further assessment of the subject property unless there is evidence which indicates that misuse, dumping, or improper storage of chemicals is present or has occurred. Based on the historical review, there were no indications of the presence of on-site agricultural chemical mixing areas, bulk storage areas or evidence that chemical dumping or improper storage has occurred.

Therefore, PM no longer considers the former orchard a REC and no additional investigation is warranted.

4.10: Environmental Liens, Activity and Use Limitations, and Government Institutional and Engineering Controls

PM has not identified any record of environmental liens, activity and use limitations, or institutional controls or engineering controls associated with the subject property through review of reasonable ascertainable records.

5.0 INTERVIEWS

The objective of completing interviews with knowledgeable site contacts is to obtain information about the uses and physical characteristics of the property. In general, interviewees supported the information reviewed from other historical sources (i.e. aerial photos, city records, etc.).

Phase I ESA of the Light Industrial Property
Located at 28016 Oakland Oaks Court, Wixom, Michigan
PM Project No. 01-9074-0-0001; November 9, 2017

Represents	Interviewed	Name and Title	Length of Time Associated with Subject Property	Comments
Current Property Owner	Yes	Mr. Jeff Layer, current owner (Oakland Oaks-EPP LLC)	Two years	Mr. Layer indicated that the building was formerly occupied by an automobile parts storage company in 2011. Upon his acquisition of the building, a fire axe company occupied the building and also conducted steel bar cutting operations. According to Mr. Layer, any cutting solutions were contained within machinery. The waste solution was later removed from the machinery and discarded off-site by a third party company. These operations occurred for less than one year before the most recent tenant, SurClean Inc. occupied the building for one year. Operations were consistent with laser cleaning demonstrations and showrooms for prospective clients. No information provided by Mr. Layer causes reason to identify any on-site environmental concerns for the subject property.
Former Property Owner	No	Not applicable	Not applicable	Contact information for the former owner was not reasonably ascertainable or provided by the User
Key Site Manager	No	Not applicable	Not applicable	The subject building was vacant of occupants at the time of the site reconnaissance; therefore, no Key Site Manager was available for an interview.
Current Occupant(s)	No	Not applicable	Not applicable	The subject building was vacant of occupants at the time of the site reconnaissance; therefore, no Current Occupant was available for an interview.
Former Occupant(s)	No	Not applicable	Not applicable	Contact information for the former occupants was not reasonably ascertainable or provided by the User

Represents	Interviewed	Name and Title	Length of Time Associated with Subject Property	Comments
Other(s)	No	Not applicable	Not applicable	No other relevant interviews were conducted as part of this Phase I ESA.

6.0 SUMMARY OF HISTORICAL USE

Standard and other historical sources were able to document the subject property was developed prior to 1940 with an orchard. The orchard operations ceased in the late 1980s, and the current light industrial building was constructed in 1989. The building was occupied by an automobile parts testing company, Kelsey-Hayes/TRW, from at least 1995 until at least 2004 and was vacant from at least 2007 until at least 2011. Fleet Service, an automobile parts storage company, occupied the building in at least 2014. The building was most recently occupied by SurClean, Inc., a laser coating removal company. According to site contacts and the company website, SurClean, Inc. did not conduct chemical stripping, media blasting, or use abrasives. Therefore, PM has not identified the former laser coating removal operations as a REC. SurClean, Inc. occupied by the building from 2016 until the fall of 2017 when the building became vacant.

Refer to Section 4.9 for additional information regarding previous site assessment activities, including assessment of the former orchard.

7.0 SUBJECT PROPERTY RECONNAISSANCE

Reconnaissance Information	
PM Field Personnel:	Mr. Christopher Johnstone
Site Reconnaissance Date:	October 27, 2017
Escort:	Mr. Thomas Murray; Hosco Fittings (prospective purchaser)
Limitations:	None identified

7.1: Subject Property Observations

The subject building contains 16,306 square feet and is divided into offices with restrooms and storage closets in the western portion of the building and a high-bay warehouse in the eastern portion of the building.

Interior finish materials include ceramic floor tile, concrete floors with an epoxy coating, drywalls, concrete block walls, two foot by four foot acoustical ceiling tiles, and exposed metal decking ceilings. The epoxy coated concrete floors appeared to be in good condition with no cracking, damage, or staining. The entire building is on a poured concrete foundation.

An asphalt-paved parking area is located at the northwestern portion of the property, and a loading dock with concrete slabs is located at the eastern exterior of the building. The remainder of the property contains groomed grass and landscaped areas.

The following table summarizes the site observations. Affirmative responses are discussed in more detail following the table.

Category	Feature	Observed
Interior Equipment	Elevators	No
	Air Compressors	No
	Incinerators	No
	Waste Treatment Systems	No
	Presses/Stamping Equipment	No
	Press Pits and/or In-ground Pits	No
	Hydraulic Lifts or In-ground hoists	No
	Paint Booth	No
	Plating Tanks	No
	Parts Washers	No
	Lathes, Screw Machines, etc.	No
Aboveground Chemical or Other Waste Storage or Waste Streams	Aboveground Storage Tanks (ASTs)	No
	Drums, Barrels and/or Containers > 5 gallons	No
	Chip Hoppers	No
	Hazardous or Petroleum Waste Streams	No
Underground Chemical or Waste Storage, Drainage or Collection Systems	Underground Storage Tanks	No
	Fuel Dispensers	No
	Sumps or Cisterns	No
	Dry Wells	No
	Oil/Water Separators	No
	Floor Drains, Trench Drains, etc.	No
	Pipeline Markers	No
Exterior Observations	Stressed Vegetation	No
	Stained Soil or Pavement	No
	Monitoring Wells	No
	Pad or Pole Mounted Transformers and/or Capacitors	Yes
	Soil Piles of Unknown Origin	No
	Exterior Dumpsters with Staining	No
	Leachate or Other Waste Seeps	No
	Trash, Debris, and/or Other Waste Materials	No
	Uncontrolled Dumping or Disposal Areas	No
	Surface Water Discoloration, Sheen or Free Product	No
	Strong, Pungent or Noxious Odors	No
	Storm water retention or detention ponds	No
	Pits, Ponds, Lagoons	No

Pad or Pole Mounted Transformers and/or Capacitors: The subject property is supplied with underground secondary electrical service from one pad-mounted electrical transformer located at the east exterior of the building. The transformer is designated as the property of the public utility, and is not labeled regarding PCB content. No leakage of the transformer was observed at the time of the site reconnaissance.

7.1.1: Current Operations

The subject property is currently unoccupied and therefore there are no current business operations.

8.0 ADJOINING PROPERTIES

The following paragraphs provide information about the adjoining properties obtained during the site reconnaissance and through review of reasonably ascertainable information.

North Adjoining Property

The north adjoining property, identified as 28026 Oakland Oaks Court, is occupied by Hosco Fittings, a paint hose and fitting delivery manufacturer. Review of historical records documents the property was developed prior to 1940 with an orchard. The orchard operations ceased between 1983 and 1989 when the current light industrial building was constructed. The building was occupied by a paper distributor from at least 1991 until at least 1994 and by an automobile break parts testing and distribution company from at least 1995 until at least 2004 (this property and the subject property were owned and occupied by the same party during this time period). The building was vacant from at least 2007 until at least 2011 and has been occupied by Hosco Fittings since 2011. This property is identified in the regulatory database. Refer to Section 9.2 for additional information.

East Adjoining Property

The east adjoining property, identified as 28003-28023 Center Oaks Court, consists of two light industrial buildings and occupants include Tapeman, a packaging company, and Hans Auto Electric, an electric car repair company. Review of historical records documents the property was developed prior to 1940 with an orchard. The orchard operations ceased between 1983 and 1989 when the current light industrial buildings were constructed. Occupants in the buildings have consisted of equipment and parts distributors for hospitals, automobile, and technology companies since at least 1991. This property is identified in the regulatory database. Refer to Section 9.2 for additional information.

South Adjoining Property

The south adjoining property is currently vacant land; however, this property was historically a portion of the former orchard. The orchard operations ceased between 1983 and 1989 when the property became vacant land.

West Adjoining Properties, across Oakland Oaks Court

The southwest adjoining property, identified as 28005 Oakland Oaks Court, is occupied by Brown Jig Grinding. Review of historical records documents the property was developed prior to 1940 with an orchard. The orchard operations ceased between 1983 and 1989 when the property became vacant. The property was vacant until the construction of the current light industrial building between 1994 and 1997. The building was occupied by TNT Systems Incorporated, a rescue equipment distributor, from at least 1997 until at least 1998 and has been occupied by Brown Jig Grinding, a grinding company, since at least 2000. Based on the lack of identification in the regulatory database and the distance from the subject property (approximately 100 feet southwest), PM has not identified the property as a REC.

The west adjoining property, identified as 28013 Oakland Oaks Court, is occupied by a Nextel Cellular Tower. Review of historical records documents the property was developed prior to 1940 with an orchard. The orchard operations ceased between 1983 and 1989, and the cellular tower was constructed by 1989.

9.0 REGULATORY RECORDS REVIEW

PM retained EDR to provide current regulatory database information compiled by a variety of federal and state regulatory agencies. A copy of the complete database is included in Appendix D. The following information was obtained:

Type	Regulatory Agency Database	Approximate Minimum Search Distance (AMSD)	Number of Sites within AMSD
Federal	National Priority List (NPL) Sites	1 mile	0
Federal	Delisted National Priority List (DNPL) Sites	½ mile	0
Federal	Superfund Enterprise Management System (SEMS) (formerly CERCLIS – renamed in 2015) Sites	½ mile	0
Federal	SEMS-Archive Sites (formerly CERLIS-NFRAP – renamed 2015)	½ mile	0
Federal	Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Sites	1 mile	0
Federal	RCRA non-CORRACTS Treatment, Storage or Disposal Facilities (TSDF) Sites	½ mile	0
Federal	RCRA Large Quantity Generators (LQG) Sites	subject property and adjoining properties	0
Federal	RCRA Small Quantity Generators (SQG) Sites	subject property and adjoining properties	0
Federal	RCRA Conditionally Exempt Small Quantity Generators (CESQG) Sites	subject property and adjoining properties	1
Federal	RCRA Non-Generators (NON-GEN) Sites	subject property and adjoining properties	1
Federal	Institutional Control / Engineering Control Registries	subject property	0
Federal	Environmental Response and Notification System (ERNS)	subject property	0
State & Tribal	Hazardous Waste Sites (HWS) (equivalents to NPL and CERCLIS)	1 mile	0
State & Tribal	Solid Waste Facilities/Landfill Sites (SWF/LF)	½ mile	1
State & Tribal	Leaking Underground Storage Tank (LUST) Sites	½ mile	0
State & Tribal	Registered Underground Storage Tank (UST) Sites	subject property and adjoining properties	0
State & Tribal	Institutional Control / Engineering Control Registries	subject property	0
State & Tribal	Brownfield Sites	½ mile	1
State & Tribal	Michigan Inventory of Facilities (Includes Part 201 Sites and Baseline Environmental Assessment {BEA} Sites)	½ mile	0
Either	Unmappable Database Listings (a.k.a. Orphan Sites)	database-dependent	0

9.1: Subject Property and Occupant Listings

The subject property or its known occupants are not identified in the referenced databases. However, the former occupant, Kelsey-Hayes Company, was identified as a Waste Disposal Systems (WDS) site. This company occupied the building in at least 1995 until at least 2004 and

distributed automotive break parts. Based on the size and layout of the building, the manufacturing of the automotive break parts likely did not occur at the subject property, and operations were likely limited to distribution and testing of the equipment. Based on this information, PM has not identified this listing as a REC.

9.2: Adjoining and Nearby Sites

PM's review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby sites. To evaluate which of the adjoining and nearby sites identified in the regulatory database report present an environmental risk to the subject property, PM considered the following criteria:

- The type of database on which the site is identified.
- The topographic position of the identified site relative to the subject property.
- The direction and distance of the identified site from the subject property.
- Local soil conditions in the subject property area.
- The known or inferred groundwater flow direction in the subject property area.
- The status of the respective regulatory agency-required investigation(s) of the identified site, if any.
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes, and ditches) located between the identified site and the subject property.

Only those sites that are judged to present a potential environmental risk to the subject property and/or warrant additional clarification are further evaluated. Using the referenced criteria, and based upon a review of readily available information contained within the regulatory database report, PM did not identify adjoining (i.e., bordering) or nearby sites (e.g., properties within a ¼-mile radius) listed in the regulatory database report that were judged to present a potential environmental risk to the subject property, with the exception of the following:

Hosco Fittings LLC – This site is identified as 28026 Oakland Oaks Court and is the north adjoining property. Review of the regulatory database indicated the site is identified as a RCRA-CESQG of hazardous waste with no violations. PM attempted to review MDEQ file information for the RCRA status; however, PM received a response indicating that no files were available. The listing is likely related to the disposal of waste associated with the manufacturing of hoses and fittings for paint products from the property. Based on the lack of violations, PM has not identified the property as a REC.

Castrol Industrial Great Lakes – This site is identified as 28023 Center Oaks Court and was a former tenant at the east adjoining property. Review of the regulatory database indicates this tenant is a RCRA non-generator of hazardous waste with one violation in 1996. The violation was associated with the improper documentation and labeling of manifests for the MDEQ and does not represent an environmental concern. The property was also historically registered as a SQG in both 1991 and 1996. PM reviewed available MDEQ file information which documented the storage of corrosives from expired, obsolete products used for the distribution of cutting and grinding equipment. Based on proper disposal and lack of violations, PM has not identified the property as a REC.

10.0 FINDINGS, OPINIONS AND CONCLUSIONS

10.1: De Minimis Condition

A de minimis condition, as defined in the ASTM Standard, is a condition that generally does not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs or CRECs. No de minimis conditions were identified during this assessment.

10.2: Significant Data Gaps

A data gap, as defined in the ASTM Standard, is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts by the environmental professional to gather such information. The environmental professional must then determine whether these gaps are significant. PM did not identify or encounter any instances of significant data gaps during the course of this ESA.

10.3: Historical Recognized Environmental Conditions (HRECs)

An HREC, as defined in the ASTM Standard, is a past release of hazardous substances or petroleum products that has occurred in connection with the subject property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the subject property to any required controls. PM has not identified any HRECs in association with the subject property.

10.4: Recognized Environmental Conditions (RECs)

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Light Industrial Property located at 28016 Oakland Oaks Court, Wixom, Oakland County, Michigan, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property.

10.5: Controlled Recognized Environmental Conditions (CRECs)

A CREC, as defined in the ASTM Standard, is a recognized environmental condition (REC) resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. PM has not identified any CRECs in association with the subject property.

10.6: Recommendations

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Light Industrial Property located at 28016 Oakland Oaks Court, Wixom, Oakland County, Michigan, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has

revealed no evidence of recognized environmental conditions connected with the property. Therefore, no further investigation is recommended at this time.

11.0 NON-ASTM SCOPE CONSIDERATIONS/BUSINESS ENVIRONMENTAL RISKS

PM has included a discussion of Non-ASTM Scope Considerations based upon industry standards and lender requirements. A Business Environmental Risk is defined as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

Non-ASTM Item	Observations or Information
Potential Asbestos Containing Materials (ACMs)	Based on PM's limited visual observations during the site reconnaissance, suspect ACMs identified included two foot by four foot acoustical ceiling tiles and drywall walls. The materials appeared to be in good condition. In the future, a comprehensive asbestos survey prior to significant renovation or demolition activities.
Lead Based Paint (LBP)	Based on the construction of the subject building in 1989 (post 1978 when Federal regulations banned the use of LBP), the potential for LBP to be present is low. If a more definitive determination for LBP is preferred, PM can provide a scope of work to address.
Visual Mold or Significant Moisture Damage	PM performed a limited visual assessment for the presence of mold, conditions conducive to mold, and evidence of moisture in readily accessible interior areas of the subject property. PM did not note obvious visual indications of the presence of mold, conditions conducive to mold, or evidence of moisture in readily accessible interior areas of the subject property.

12.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Kristin Gable
Regional Due Diligence Manager



Kevin M. Kruszewski, P.G.
V.P. – Environmental Risk Management

13.0 REFERENCES

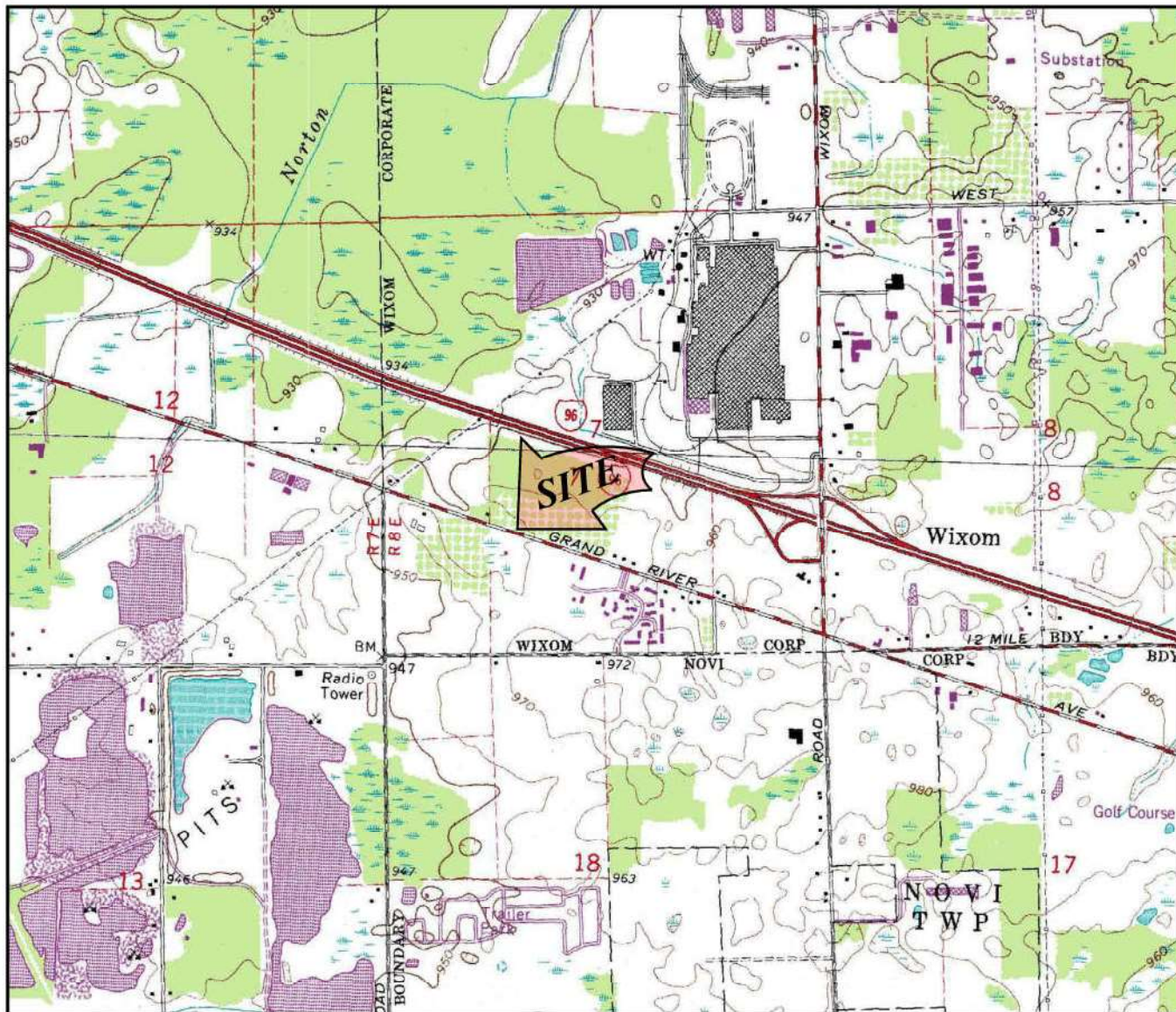
The following published sources were utilized during completion of this Phase I ESA:

- *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM, ASTM Designation E 1527-13, Published November 2013.
- Bresser's Cross-Index City Directories, Bresser's in Detroit, Michigan. City: Wixom. Years: 1957-2014.
- United States Geological Survey Division (U.S.G.S.) 7.5 Minute Topographic Map Salem, Michigan Quadrangle, 1967 (photo-revised 1983).
- *Custom Soil Survey of Oakland County, Michigan*, U.S. Department of Agriculture, February 2017.

In addition, PM reviewed the following previous site investigations:

- Phase I ESA, September 12, 2011, PM
- Phase II ESA, November 18, 2011, PM

Figures



OAKLAND COUNTY



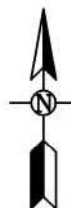
MICHIGAN QUADRANGLE LOCATION



FIGURE 1

PROPERTY VICINITY MAP
USGS, 7.5 MINUTE SERIES

SALEM, MI QUADRANGLE, 1969. PHOTO REVISED 1973 & 1980.



Environmental
& Engineering
Services

PROJ:
LIGHT INDUSTRIAL PROPERTY
28016 OAKLAND OAKS COURT
WIXOM, MI

THIS IS NOT A LEGAL
SURVEY

VERIFY SCALE

0 1" IF NOT 1" ON THIS
SHEET, ADJUST
SCALES ACCORDINGLY.

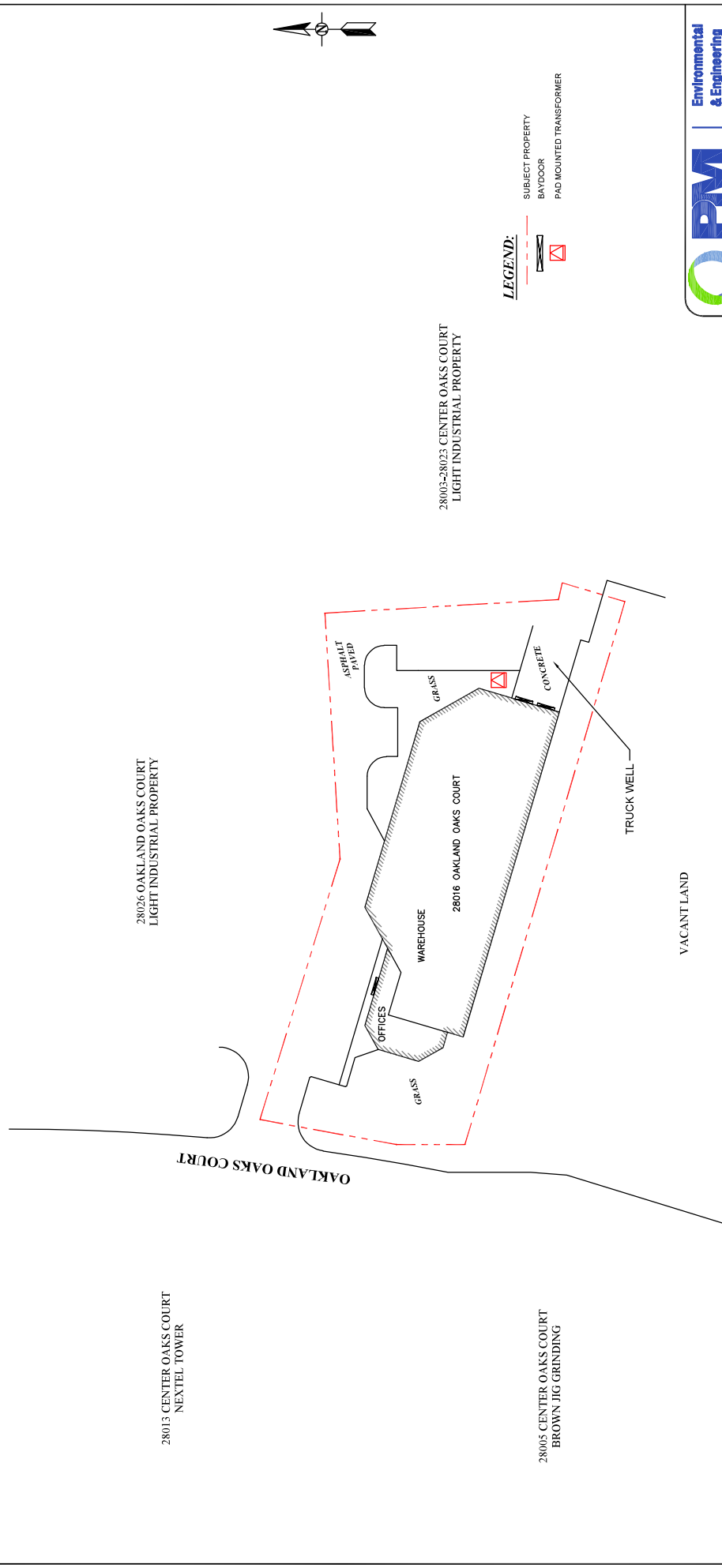
DRN BY: CS

DATE: 11/8/2017

CHKD BY: KW/JA/CJ

SCALE: 1" : 2,000'

FILE NAME: 01-9074-0-001F01R00



LEGEND:

--- SUBJECT PROPERTY

□ BAY DOOR

▣ PAD MOUNTED TRANSFORMER



**Environmental
& Engineering
Services**

FIGURE 2
GENERALIZED DIAGRAM OF THE SUBJECT
PROPERTY AND ADJOINING PROPERTIES

PROJ: LIGHT INDUSTRIAL PROPERTY
28016 OAKLAND OAKS COURT
WIXOM, MI

THIS IS NOT A LEGAL SURVEY	DRAWN BY: CS	DATE: 11/8/2017
VERTICAL SCALE 0	CHECKED BY: KW/CJ	SCALE: 1" = 60'
# OF SHEETS: 10 SHEET NO.: 01 SHEET TITLE: ADJUT SCALE: ACCURACY		

Appendix A

SITE PHOTOGRAPHS



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 1



Subject property

Photograph 2



North facing façade of the subject building



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 3



East facing façade of the subject building

Photograph 4



South facing façade of the subject building



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 5



West facing façade of the subject building

Photograph 6



View of the office portion of the building



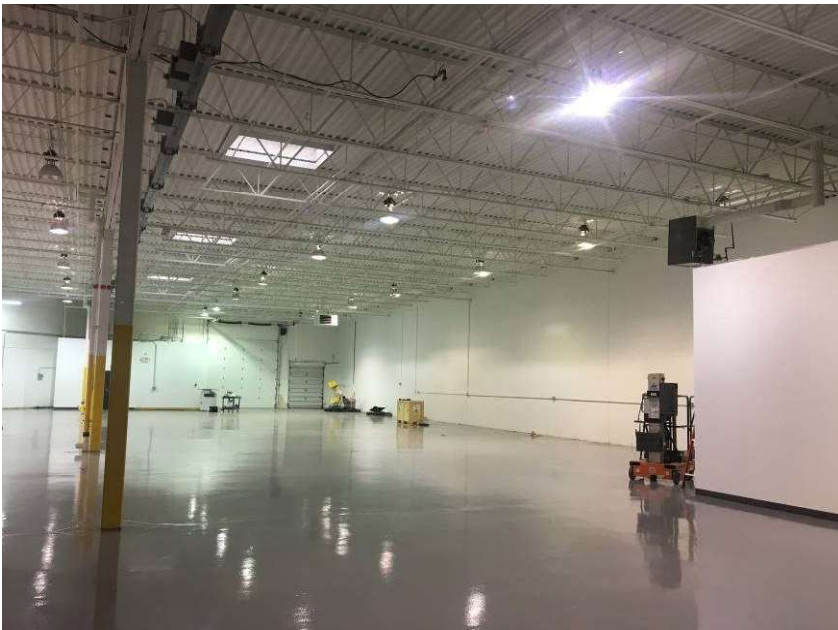
Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 7



View of the office portion of the building

Photograph 8



View of the warehouse portion of the building



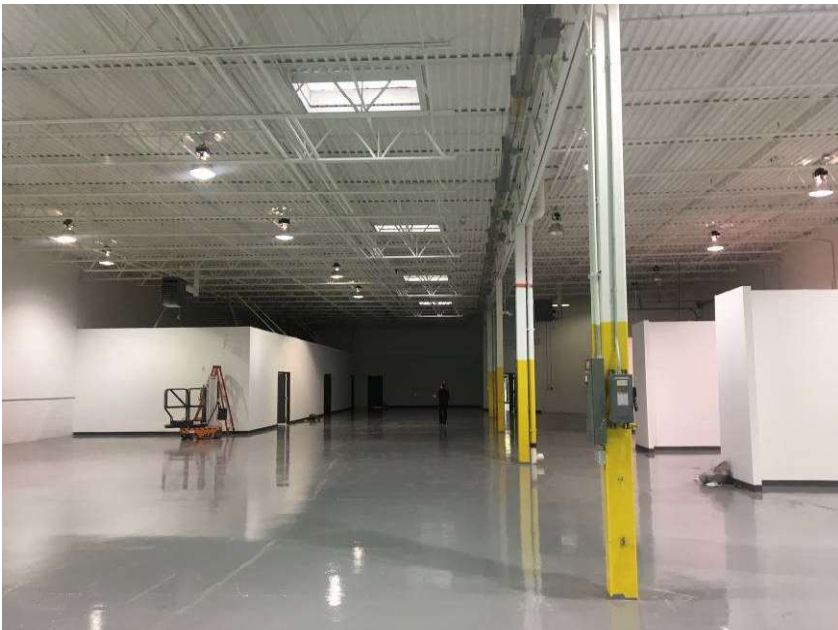
Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 9



View of the warehouse portion of the building

Photograph 10



View of the warehouse portion of the building



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 11



View of the pad-mounted transformer at the east exterior of the building

Photograph 12



View of the north adjoining Hosco Fittings property



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 13



View of one of the east adjoining light industrial buildings

Photograph 14



View of the second east adjoining light industrial building



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 15



View of the south adjoining vacant land

Photograph 16



View of the southwest adjoining Brown Jig Grinding property



Photographs From Site Reconnaissance
PM Project No. 01-9074-0-0001
Location: 28016 Oakland Oaks Court, Wixom, Michigan

Photograph 17



View of the west adjoining Nextel Cellular
Tower property

Appendix B

USER QUESTIONNAIRE

Phase I ESA - ASTM User Questionnaire

Project Address: 28016 Oakland Oaks Court, Wixom, Michigan

The ASTM Standard defines a User as "the party seeking to use Practice E 1527 to complete an environmental site assessment. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments") the **User** must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

Please answer the following questions to the best of your knowledge and return to PM Environmental, Inc. (PM) with the signed copy of your proposal.

1. Environmental Clean-up liens that are filed or recorded against the site (40 CFR 312.25)

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

Yes

☒ No

If so, please describe the type of liens:

2. Activity and land use limitations that are in place on the site or that have been filed in a registry (40 CFR 312.26)

Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

Yes

☒ No

If yes, what type of AULs are you aware of?

3. Specialized knowledge or experience of the person seeking to qualify for a LLP (40 CFR 312.28)

As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and the processes used by this type of business?

☒ Yes

No

If yes, what type of business are you associated with?

What types of chemicals are used in your business?

PERFORMED PHASE I & PHASE II FOR SAME PROPERTY 12/2012.
NO POTENTIAL CHANGE SINCE THEN.
PM Environmental, Inc.
Page 1

Initial here

Phase I ESA - ASTM User Questionnaire

Project Address: 28016 Oakland Oaks Court, Wixom, Michigan

4. Relationship to the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29)

Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

Yes No

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

Yes No

5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example as a user:

a. Do you know of the past uses of the property?

Yes No

If yes, please list what past uses you are aware of?

LIGHT INDUSTRIAL,
VERY CLEAN, PHASE 1 & 2 IN 2012 WERE CLEAN

b. Do you know of specific chemicals that are present or once were present at the property?

Yes No

If yes, please list what chemicals you are aware of?

c. Do you know of spills or other chemical releases that have taken place on the property?

Yes No

d. Do you know of any environmental cleanups which have taken place on the property?

Yes No

If yes, do you have copies of any of the reports documenting the work?

Yes No

If you have any documentation of the previous environmental clean-up please provide copies to PM when you return this questionnaire.

Phase I ESA - ASTM User Questionnaire

Project Address: 28016 Oakland Oaks Court, Wixom, Michigan

6. The degree of the obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate investigation (40CFR 312.31)

As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination on the property?

Yes

No

If yes, please comment on what those indicators are (i.e. lower purchase price, areas of staining,

poor housekeeping, etc):

User Name:

HOSCO INVESTMENTS LLC

Company Name property is being purchased under:

Street Address:

28026 OAKLAND OAKS CT

City, State, Zip code:

WIXOM MI 48393

User Phone Number:

248 912 1750

Signature of the User:

John Zurek

Date Questionnaire was completed on:

10-3-2017

SOIL SURVEY INFORMATION



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Oakland County, Michigan**



November 7, 2017

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map



Soil Map may not be valid at this scale.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10B	Marlette sandy loam, 1 to 6 percent slopes	0.9	98.6%
12	Brookston and Colwood loams	0.0	1.4%
Totals for Area of Interest		0.9	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Oakland County, Michigan

10B—Marlette sandy loam, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: 6bgk

Elevation: 660 to 980 feet

Mean annual precipitation: 35 to 40 inches

Mean annual air temperature: 50 to 55 degrees F

Frost-free period: 155 to 180 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Marlette and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marlette

Setting

Landform: Knolls on moraines, flats on till plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Loamy ablation till

Typical profile

H1 - 0 to 8 inches: sandy loam

H2 - 8 to 22 inches: loam

H3 - 22 to 31 inches: clay loam

H4 - 31 to 60 inches: loam

Properties and qualities

Slope: 1 to 6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 30 to 72 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Capac

Percent of map unit: 2 percent

Landform: Drainageways on till plains, drainageways on moraines

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Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Oshtemo

Percent of map unit: 2 percent
Landform: Knolls on moraines, knolls on beach ridges, knolls on outwash plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Metamora

Percent of map unit: 2 percent
Landform: Drainageways on till plains, drainageways on moraines, flats on till plains, flats on moraines
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Fox

Percent of map unit: 2 percent
Landform: Knolls on outwash plains, knolls on moraines
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Brookston

Percent of map unit: 2 percent
Landform: Depressions on moraines, depressions on lake plains, depressions on moraines, till plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

12—Brookston and Colwood loams

Map Unit Setting

National map unit symbol: 6bgq
Elevation: 660 to 980 feet
Mean annual precipitation: 35 to 40 inches
Mean annual air temperature: 50 to 55 degrees F
Frost-free period: 155 to 180 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Brookston and similar soils: 55 percent

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Colwood and similar soils: 35 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brookston

Setting

Landform: Depressions on lake plains, depressions on till plains, depressions on moraines

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy ablation till

Typical profile

H1 - 0 to 16 inches: loam

H2 - 16 to 36 inches: clay loam

H3 - 36 to 60 inches: loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Very poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 35 percent

Available water storage in profile: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D

Hydric soil rating: Yes

Description of Colwood

Setting

Landform: Depressions on till plains, depressions on lake plains, depressions on moraines

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Stratified loamy glaciofluvial deposits

Typical profile

H1 - 0 to 11 inches: loam

H2 - 11 to 37 inches: silty clay loam

H3 - 37 to 60 inches: stratified fine sand to silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Medium

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 20 percent

Available water storage in profile: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C/D

Hydric soil rating: Yes

Minor Components

Gilford

Percent of map unit: 3 percent

Landform: Depressions on outwash plains

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Sebewa

Percent of map unit: 3 percent

Landform: Depressions on outwash plains

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Capac

Percent of map unit: 1 percent

Landform: Drainageways on till plains, drainageways on moraines

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Kibbie

Percent of map unit: 1 percent

Landform: Drainageways on till plains, drainageways on outwash deltas on till plains, flats on outwash deltas on till plains, flats on till plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Metamora

Percent of map unit: 1 percent

Landform: Drainageways on till plains, drainageways on moraines, flats on till plains, flats on moraines

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

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Selfridge

Percent of map unit: 1 percent

Landform: Drainageways on till plains, flats on till plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Qualities and Features

This folder contains tabular reports that present various soil qualities and features. The reports (tables) include all selected map units and components for each map unit. Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected

initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Custom Soil Resource Report

Soil Features—Oakland County, Michigan										
Map symbol and soil name	Restrictive Layer				Hardness	Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness			Initial	Total		Uncoated steel	Concrete
		Low-RV-High	Range			Low-High	Low-High			
		In	In			In	In			
10B—Marlette sandy loam, 1 to 6 percent slopes										
Marlette		—	—			0	—	Moderate	High	Low
Brookston		—	—			0	—	High	High	Low
Capac		—	—			0	—	High	High	Low
Fox		—	—			0	—	Moderate	High	Moderate
Metamora		—	—			0	—	High	High	Low
Oshtemo		—	—			0	—	Moderate	High	Moderate
12—Brookston and Colwood loams										
Brookston		—	—			0	—	High	High	Low
Colwood		—	—			0	—	High	High	Low
Gilford		—	—			0	—	High	High	Low
Sebewa		—	—			0	—	High	High	Low
Capac		—	—			0	—	High	High	Low
Kibbie		—	—			0	—	High	High	Low
Metamora		—	—			0	—	High	High	Low
Selfridge		—	—			0	—	High	High	Moderate

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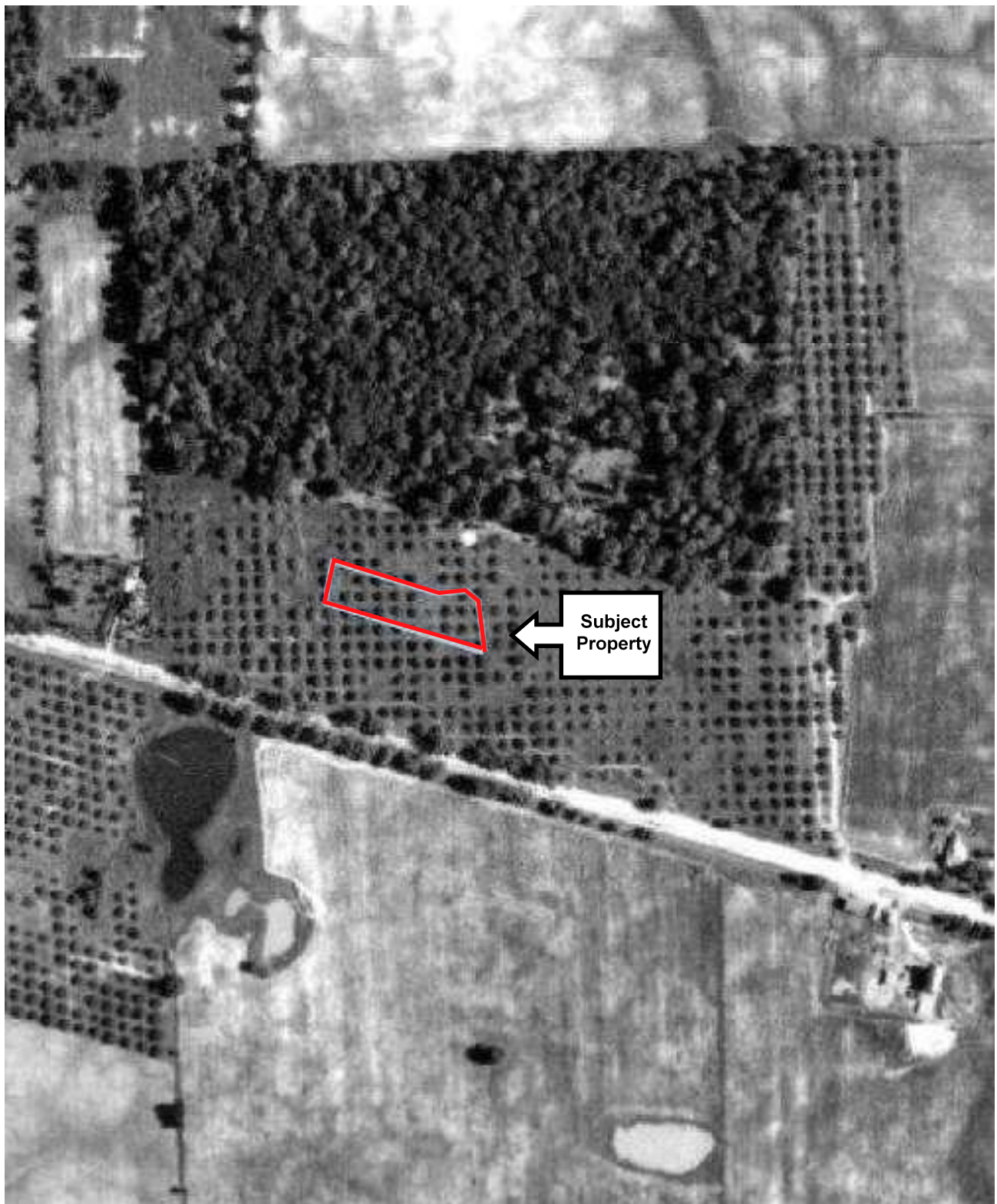
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AERIAL PHOTOGRAPHS

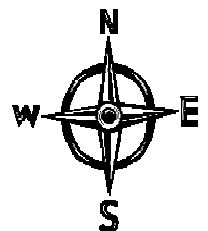


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PM Project No. 01-9074-0-0001

Aerial Year: 1940

Source: Oakland County



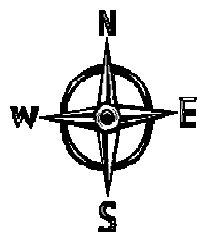


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PM Project No. 01-9074-0-0001

Aerial Year: 1949

Source: Wayne State University



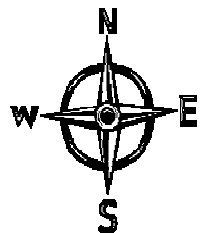


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Aerial Year: 1956

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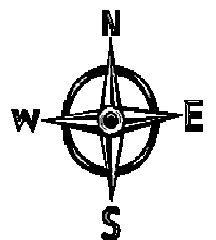


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PM Project No. 01-9074-0-0001

Aerial Year: 1961

Source: Southeast Michigan Council of Governments



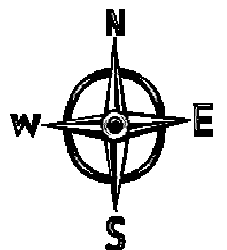


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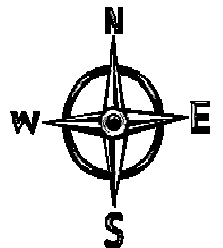


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PM Project No. 01-9074-0-0001

Aerial Year: 1967

Source: Wayne State University



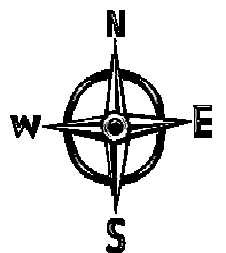


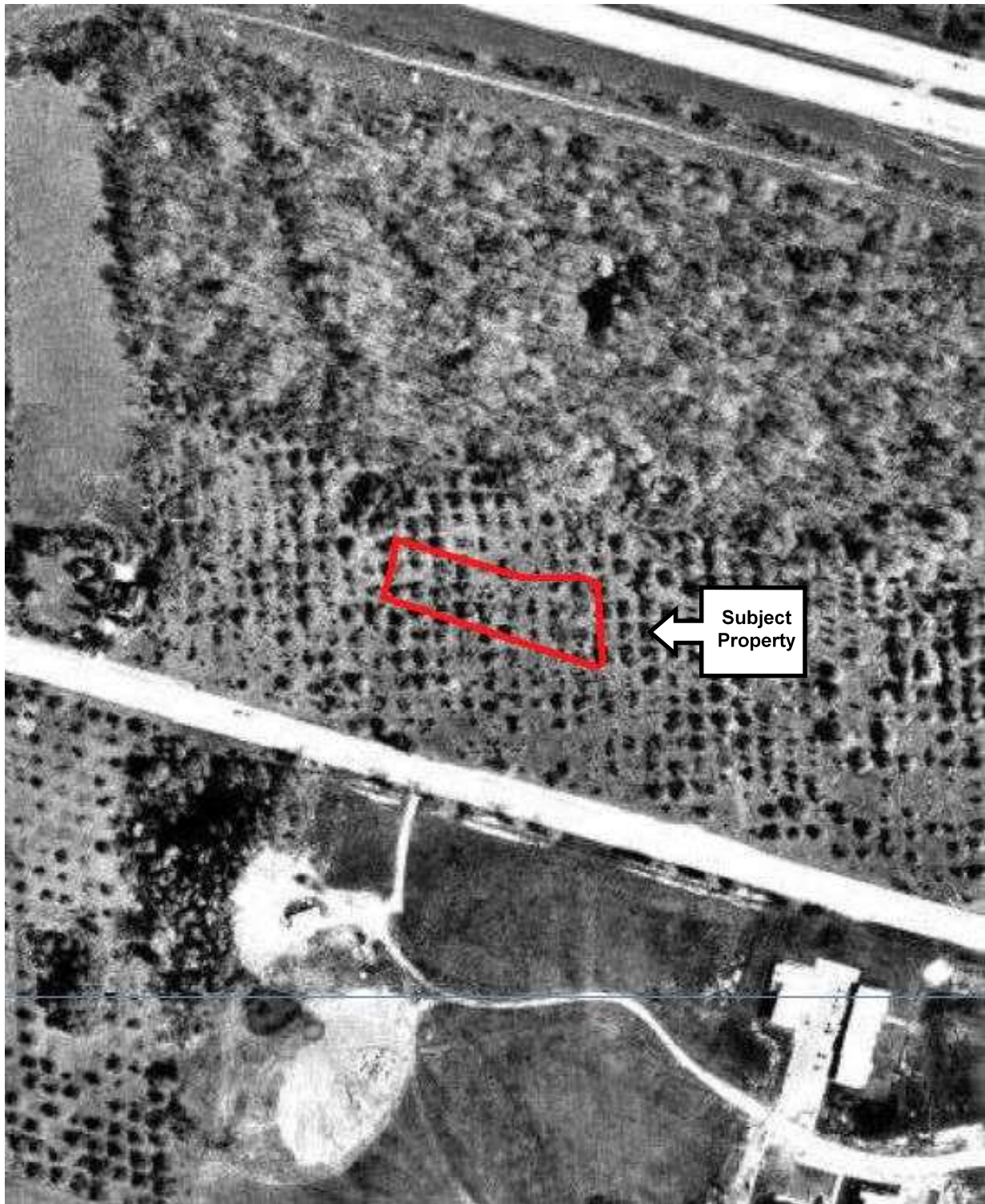
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Aerial Year: 1970

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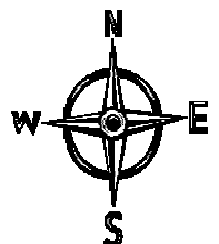


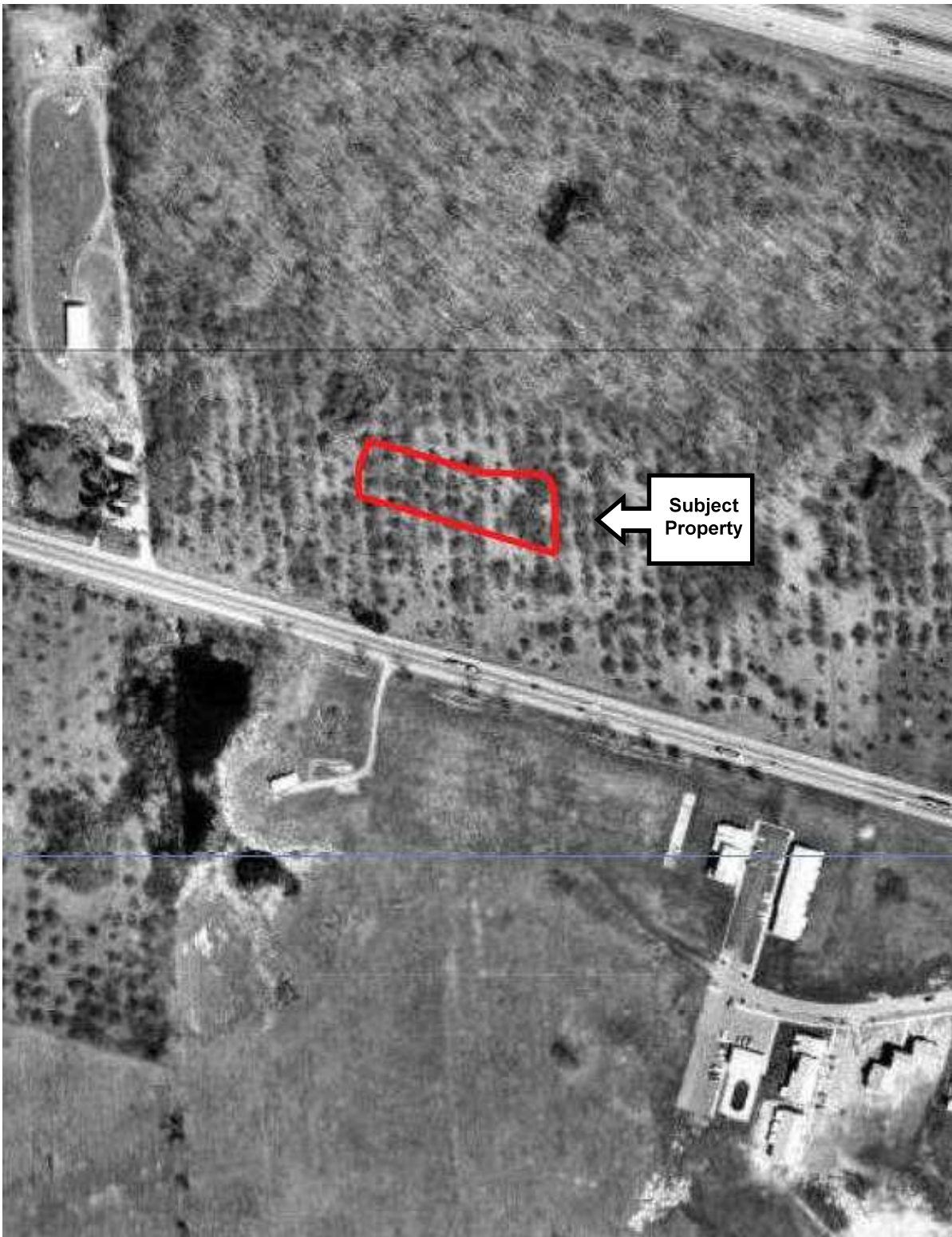
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Aerial Year: 1974

Source: Oakland County



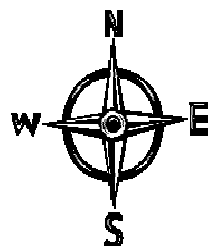


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PM Project No. 01-9074-0-0001

Aerial Year: 1980

Source: Oakland County



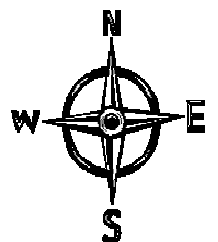


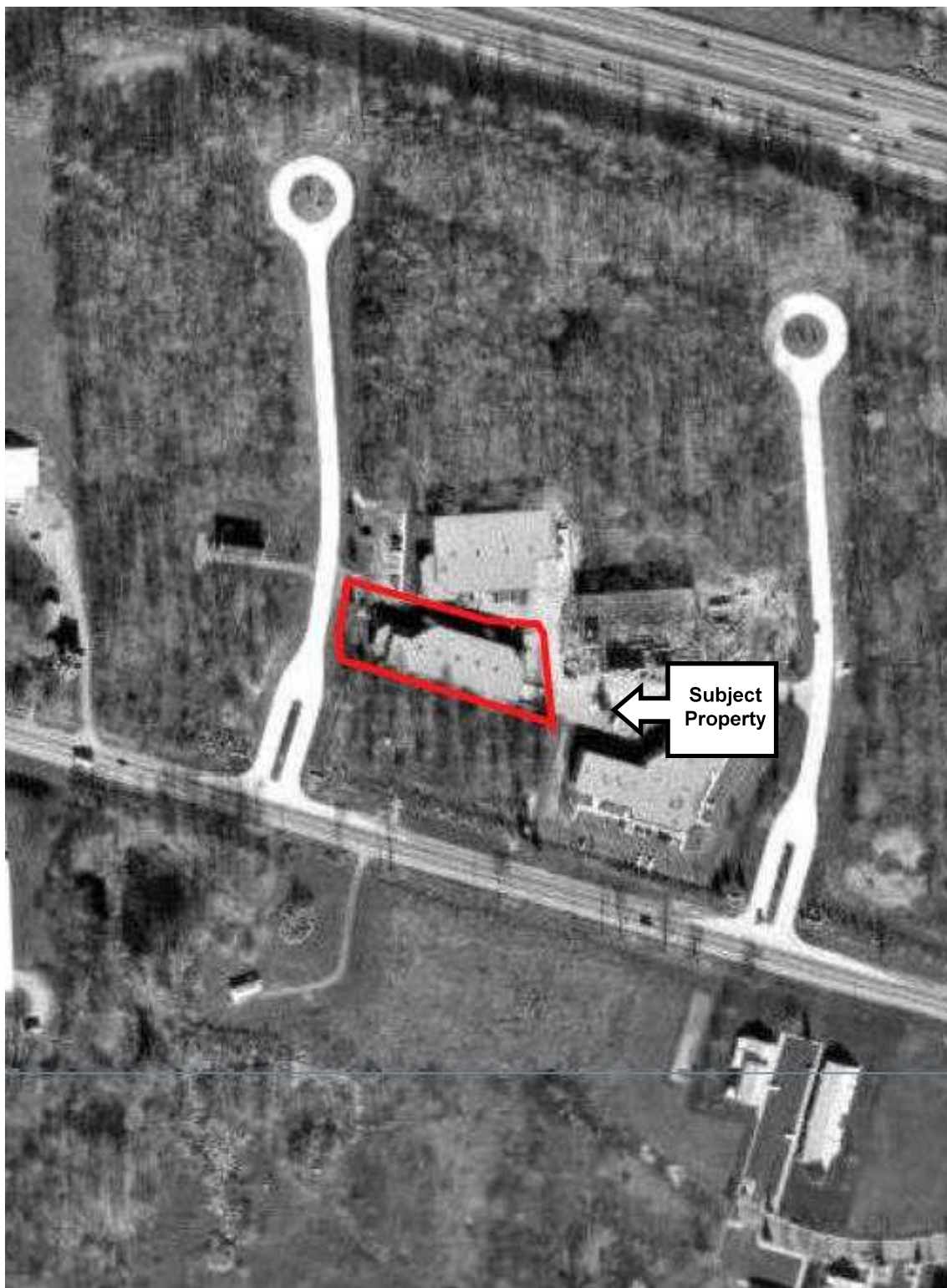
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PM Project No. 01-9074-0-0001

Aerial Year: 1983

Source: Michigan State University



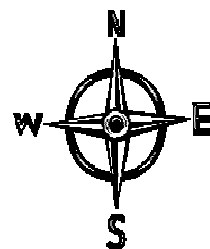


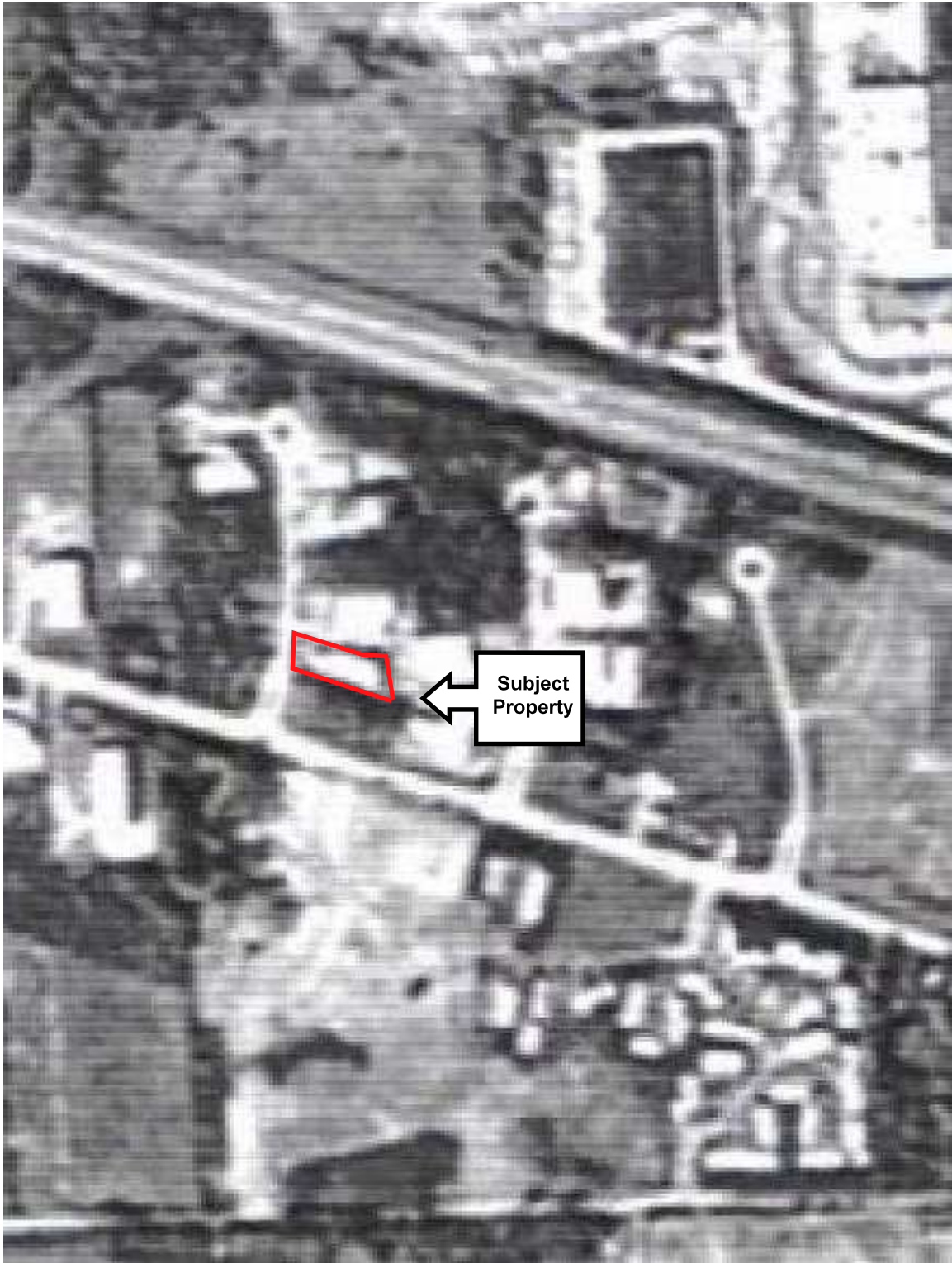
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Aerial Year: 1990

Source: Oakland County



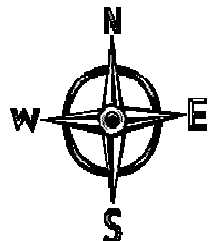


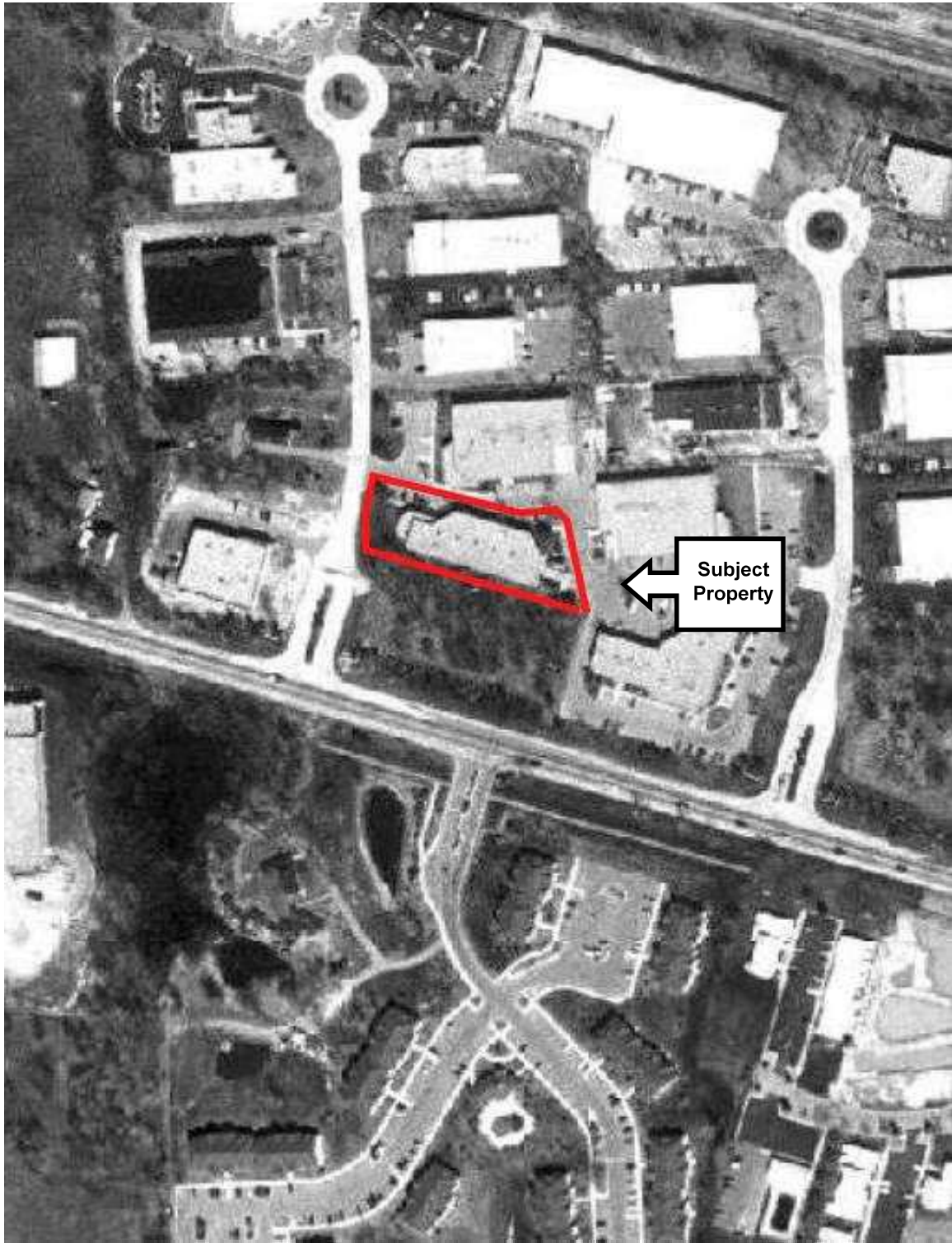
Location: 28016 Oakland Oaks Court, Wixom, Michigan

PM Project No. 01-9074-0-0001

Aerial Year: 1994

Source: Michigan State University



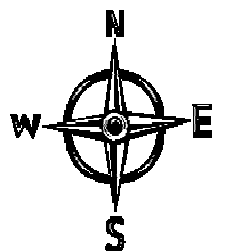


Location: 28016 Oakland Oaks Court, Wixom, Michigan

PM Project No. 01-9074-0-0001

Aerial Year: 1997

Source: Oakland County



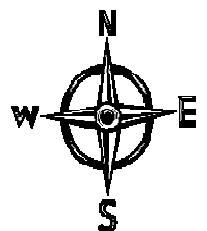


Location: 28016 Oakland Oaks Court, Wixom, Michigan

PM Project No. 01-9074-0-0001

Aerial Year: 2000

Source: Oakland County



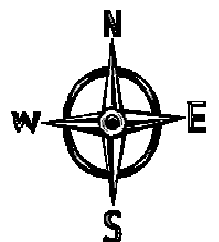


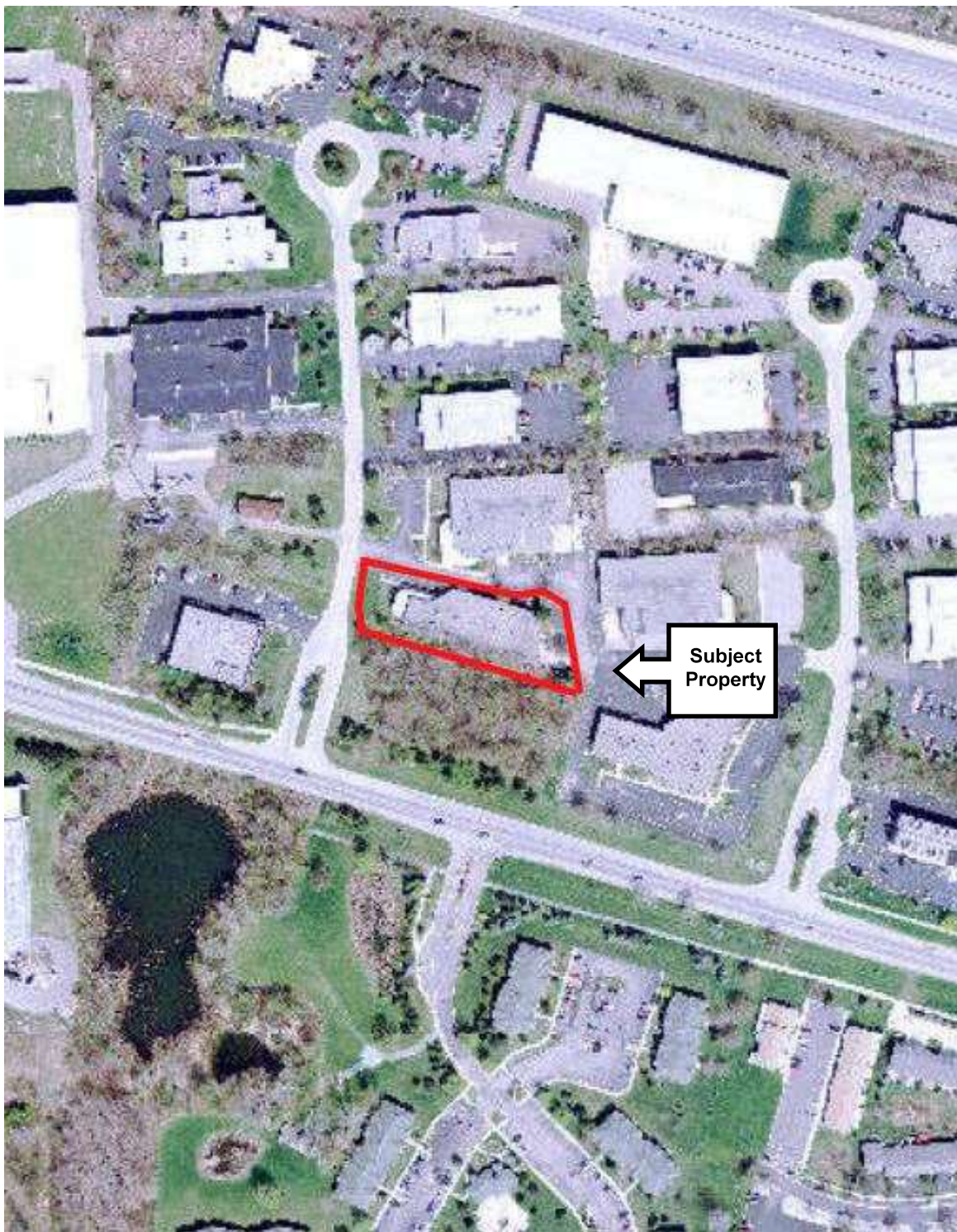
Location: 28016 Oakland Oaks Court, Wixom, Michigan

PM Project No. 01-9074-0-0001

Aerial Year: 2005

Source: Oakland County



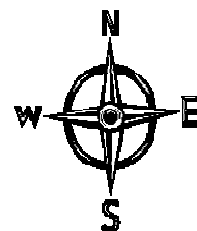


Location: 28016 Oakland Oaks Court, Wixom, Michigan

PM Project No. 01-9074-0-0001

Aerial Year: 2010

Source: Oakland County



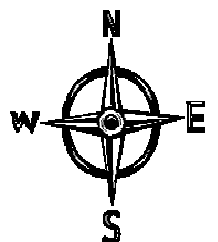


Location: 28016 Oakland Oaks Court, Wixom, Michigan

PM Project No. 01-9074-0-0001

Aerial Year: 2015

Source: Oakland County



NO SANBORN FIRE INSURANCE MAPS

ASSESSING DEPARTMENT RECORDS

Grantor	Grantee	Sale Price	Sale Date	Inst. Type	Terms of Sale	Liber & Page	Verified By	Pront. Trans.
WENGREN MICHAEL	OAKLAND OAKS-EPP	810,000	04/30/2014	WD	1-ValidSale	47024:276		100.0
CRESCENT HOUSE APTS	WENGREN MICHAEL	325,000	05/16/2012	WD	1-ValidSale	44228:163	SelectSource	100.0
DRS HOLDING	CRESCENT HOUSE APARTMENTS	1	02/03/2011	QC	2-\$forNoConsideratn	42835:221	SelectSource	0.0
DORIS SHEMTOB	D R S HOLDING LLC	769,175	06/03/2008	D	18-SheriffDeed	40371:706	SelectSource	0.0
Property Address	Class: 301 Ind Imp	Zoning: IRO	Building Permit(s)	Date	Number	Status		
28016 OAKLAND OAKS CT	School: 240 South Lyon Schools		Alteration/Remodel	05/17/2012	9612B-0107	Closed		
Owner's Name/Address	P.R.E. 0							
OAKLAND OAKS-EPP LLC 1684 HYDRAULIC DR HOWELL MI 48855	ITOnly: POST							
	2017 Est TCV 641,981 TCV/WFA: 39.37							
	X Improved Vacant							
	Public							
Tax Description	Improvements	Description	Frontage	Depth	Rate	Adj. Reason	Value	
T1N, R8E, SEC 7 OAKLAND COUNTY CONDOMINIUM PLAN NO 665 GRAND OAKS PARK UNIT 2 L 11323 P 342 4-9-90 FR 012, 013, 015, 016 & 017	Dirt Road	133.40	350.00	1.0000	0.0000	0 0*	0	
	Gravel Road							
	Paved Road							
	Storm Sewer							
	Sidewalk							
	Water							
	X Water							
	X Sewer							
	Electric							
	Gas							
	Curb							
	Street Lights							
	Standard Utilities							
	Underground Utils.							
	Topography of Site							
	X Level							
	Rolling							
	Low							
	High							
	Landscaped							
	Swamp							
	Wooded							
	Pond							
	Waterfront							
	Ravine							
	Wetland							
	Flood Plain							
	Who When What							
	075 10/24/2012 BuildingPe							
	021 07/18/2012 BuildingPe							
	J 12/31/1995 Other							
	Year	Land Value	Building Value	Assessed Value	Board of Review	Tribunal/Other	Taxable Value	
	2017	56,620	264,370	320,990			269,580C	
	2016	56,620	236,250	292,870			267,180C	
	2015	56,620	209,770	266,390			266,390S	
	2014	56,620	194,730	251,350			250,450C	

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Appendix C

PREVIOUS SITE INVESTIGATION

Environmental Risk Management



PM
ENVIRONMENTAL, INC.

ISO 9001 Registered

Michigan

Alabama

Florida

Tennessee

North Carolina

Mississippi

Illinois

*Phase I Environmental Site Assessment of the Vacant Light
Industrial Property Located at 28016 and 28026 Oakland Oaks
Court, Wixom, Michigan*

PM Environmental, Inc. Project No. 02-5055-1

800.485.0090

www.pmenv.com

September 12, 2011

Mr. Dan Hunter
Oakland County
2100 Pontiac Lake Road
Pontiac, Michigan 48328-2735

**Re: Phase I Environmental Site Assessment of the
Vacant Light Industrial Property
Located at 28016 and 28026 Oakland Oaks Court
Wixom, Michigan
PM Environmental, Inc. Project No. 02-5055-1**



Dear Mr. Hunter:

PM Environmental, Incorporated (PME) has completed the Phase I Environmental Site Assessment (ESA) of the above referenced property. This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-05* (ASTM Standard Practice E 1527-05).

The Phase I ESA for the above referenced property represents the product of PME's professional expertise and judgment in the environmental consulting industry, and it is reasonable for **HOSCO FITTINGS, LLC, BANK OF BIRMINGHAM, AND OAKLAND COUNTY** to rely on PME's Phase I ESA report.

If you have any questions related to this report please do not hesitate to contact our office at (248) 336-9988.

Sincerely,
PM ENVIRONMENTAL, INC.

A handwritten signature in black ink that reads 'Katie Ward'.

Katie Ward
Staff Consultant

A handwritten signature in black ink that appears to read 'Steven E. Price'.

Steven E. Price, CHMM
Principal & Vice President of Due Diligence

MICHIGAN

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Phone 517.321.3331
info@pmenv.com

4080 West 11 Mile Road • Berkley, MI 48072
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Phone 256.353.6222

1604 Mockingbird Court • Suite B • Florence, AL 35630
Phone 256.353.6222

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Phone 954.924.1801

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Phone 813.731.1177

NORTH CAROLINA

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Phone 423.468.1105

254 West Eastland Street • Gallatin, TN 37066
Phone 615.390.3776

1053 Oak Hill Drive • Cookeville, TN 38501
Phone 931.432.5552

**PM ENVIRONMENTAL, INC., PROJECT NUMBER 02-5055-1
PHASE I ENVIRONMENTAL SITE ASSESSMENT**

Location:

*Vacant Light Industrial Property
28016 and 28026 Oakland Oaks Court
Wixom, Michigan*

Prepared For:

*Mr. Dan Hunter
Oakland County
2100 Pontiac Lake Road
Pontiac, Michigan 48328-2735*

***PHASE I ENVIRONMENTAL SITE
ASSESSMENT OF THE VACANT LIGHT
INDUSTRIAL PROPERTY LOCATED AT 28016
AND 28026 OAKLAND OAKS COURT, WIXOM
MICHIGAN***

September 12, 2011

Prepared by:

PM Environmental, Inc.

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EXECUTIVE SUMMARY

PM Environmental, Inc., (PME) was retained to conduct a Phase I Environmental Site Assessment (ESA) of the Vacant Light Industrial Property located at 28016 and 28026 Oakland Oaks Court, Wixom, Oakland County, Michigan (hereafter referred to as the “subject property”). This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-05* (ASTM Standard Practice E 1527-05).

THE REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF HOSCO FITTINGS, LLC, BANK OF BIRMINGHAM, AND OAKLAND COUNTY, EACH OF WHOM MAY RELY ON THE REPORT’S CONTENTS.

The subject property consists of one (2) parcels containing approximately 2.37 acres and is located on the east side of Oakland Oaks Court, north of Grand River Avenue in Wixom, Michigan. The subject property is occupied by two (2) light industrial buildings; including a 14,461 square foot building, identified as 26016 Oakland Oaks Court, and a 15,000 square foot building, identified as 28026 Oakland Oaks Court. The buildings are each divided into offices, a warehouse area, a kitchen, storage areas, and restrooms. Asphalt paved parking areas and driveways are located throughout the property, with groomed grass and landscaping located in the northern and southern portion of the property, and in the right of ways. The subject buildings are currently vacant.

Reasonably ascertainable records for the subject property extended back to approximately 1940. Data failure occurred prior to that date. However, PME did not identify any significant data gaps during the completion of this Phase I ESA. Standard and other historical sources were able to document the first developed use of the subject property occurred prior to 1940 with an orchard. The property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The property was vacant land until the construction of the current buildings in 1989. The property was occupied by Clear Print Paper, a paper warehouse and dealer, from 1991 until 1994, various construction and contracting companies from 1990 until at least 2000, TRW, a small scale automotive parts testing operation, from approximately 1996 until 2006, and the subject buildings have been vacant since approximately 2006.

Historical Recognized Environmental Conditions

A historical REC, as defined in the ASTM Standard, is an environmental condition that in the past would have been identified as a REC, but has been adequately addressed and therefore no longer represents a REC. PME has not identified any historical RECs in association with the subject property.

Non ASTM Scope Considerations

PME identified the following areas of potential concern associated with the following Non ASTM Scope issues:

- PME observed suspect friable ACMs consisting of two (2) foot by four (4) foot ceiling tiles, drywall walls, and vinyl floor tiles. At the time of the site reconnaissance, these materials generally appeared to be in poor condition. The poor condition of the building materials appear to be the result of water damage. If significant interior renovation or demolition activities are planned, PME recommends that a full asbestos containing materials inspection be conducted in accordance with all applicable regulations.
- PME observed visible mold growth, damaged building materials, and standing water throughout the subject buildings. Because of the significant impact observed, mold remediation services will be required. It is recommended that a mold assessment be performed by health and safety professionals experienced in performing microbial/fungal investigations. The purpose of this assessment is to obtain sufficient information concerning the nature and extent of the mold impact and building material damage in order to prepare a mold remediation work plan that can be implemented by a mold remediation contractor.

Current Recognized Environmental Conditions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Vacant Light Industrial Property located at 28016 and 28026 Oakland Oaks Court, Wixom, Oakland County, Michigan, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except the following:

- The subject property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The long-term use of pesticides, fertilizers, other agri-chemicals, and or other petroleum products may have a residual negative impact on the soil and groundwater at the subject property.

No adjoining and/or nearby RECs have been identified.

These RECs have been brought to the attention of the client within the requirements of the ASTM Standard Designation E-1527-05.

PME recommends additional investigation to address the RECs identified in this Phase I ESA. PME could provide a cost estimate to complete this additional investigation at the request of the client.

*Phase I ESA of the Vacant Light Industrial Property
Located at 28016 and 28126 Oakland Oaks Court, Wixom, Michigan
PME Project No. 02-5055-1; September 12, 2011*

The summary presented above is general in nature and should not be considered apart from the entire text of the report, which contains the qualifications, considerations and subject property details mentioned herein. Details of findings and conclusions are elaborated upon in this report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at (248) 336-9988 to discuss this report.

REPORT PREPARED BY:

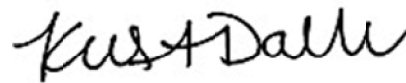
PM Environmental, Inc.



Katie Ward
Staff Consultant

REPORT REVIEWED BY:

PM Environmental, Inc.



Kristin Dawkins
Staff Consultant



Steven E. Price, CHMM
Principal & Vice President of Due Diligence

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FIGURES

Figure 1: Site Location Map

Figure 2: Generalized Diagram of the Subject Property and Surrounding Area

APPENDICES

Appendix A: Property Photographs from Site Reconnaissance

Appendix B: User Provided Information, Engagement, and Property Correspondence

Appendix C: Historical and Other Supporting Documentation

Appendix D: Previous Site Investigations

Appendix E: Regulatory Database and File Review Correspondence

Appendix F: Professional Resumes

Appendix G: Acronyms and Terminology, ASTM Reference Document, and User's Continuing Obligations under CERCLA

1.0 INTRODUCTION

PM Environmental, Inc. (PME) was retained to conduct a Phase I Environmental Site Assessment (ESA) of Vacant Light Industrial Property located at 28016 and 28026 Oakland Oaks Court, Wixom, Oakland County, Michigan (subject property). This Phase I ESA was conducted in accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-05* (ASTM Standard Practice E 1527-05).

THE REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF HOSCO FITTINGS, LLC, BANK OF BIRMINGHAM, AND OAKLAND COUNTY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

PME acknowledges that these parties may rely on the contents and conclusions presented in this report. Unless stated otherwise in writing, PME makes no other warranty, representation, or extension of reliance upon the findings of this report to any other entity or third party.

1.1: Purpose

The purpose of this Phase I ESA was to evaluate the current and historical conditions of the subject property in an effort to identify *recognized environmental conditions* (RECs) and *historical recognized environmental conditions* (HRECs) in connection with the subject property (Appendix G). This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs and HRECs in connection with the subject property.

1.2: Scope of Services

PME's scope-of-services is based on its engagement with the Client, which is included in Appendix B.

1.3: Significant Assumptions

Pursuant to ASTM Standard Practice E 1527-05, PME assumes that the information provided by all sources and parties, including the User, is accurate and complete, except where obvious inconsistencies or inaccuracies were identified.

1.4: Limitations, Exceptions, Special Terms and Conditions

There are no deletions from the ASTM Standard. Non-ASTM Scope considerations are included in Section 10.0.

Present on the subject property was a building and asphalt paved areas, which limited PME's observation of the ground surface. PME cannot make any conclusions regarding the potential for

visible signs of contamination at areas covered by the aforementioned items. PME can further evaluate these covered areas at a later date when the land/surface cover is not present.

PME was not provided with a copy of the recorded land title records for subject property by the client and was not requested to complete a title search. Therefore, PME cannot comment on any potential relevant information that may have been obtained through review of these records.

Due to changing environmental regulatory conditions and potential on-site or adjacent activities occurring after this assessment, the client may not presume the continuing applicability to the site of the conclusions in this assessment for more than 180 days after the report's issuance date.

To the best of PME's knowledge, no special terms or conditions apply to the preparation of this Phase I ESA.

2.0 USER AND/OR CLIENT PROVIDED INFORMATION

The ASTM Standard defines a User as "the party seeking to use Practice E 1527 to complete an environmental site assessment. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The User has specific obligations for completing a successful application of this practice as outlined in Section 6 of the ASTM Standard E 1527-05.

2.1: Recorded Land Title Records

PME requested reasonably ascertainable recorded land title records for the subject property from the User. However, PME did not receive any title records from the User within the time constraints of this report. Additionally, PME was not requested to complete a title search by the User. PME utilized aerial photography, city directories, assessing information, and interviews with individuals knowledgeable of the subject property area as sources to determine the historical use of the subject property. Information from these sources is referenced throughout this report.

2.2: Environmental Liens or Activity and Use Limitations

The User did not report any: (1) environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law; or (2) activity and use limitations (AULs), such as engineering controls, land use restrictions or institutional controls, that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law.

PME reviewed the list of MDEQ Part 201 Enforcement Liens for the State of Michigan. There was no information regarding environmental liens encumbering the subject property. Prior interviews with Ms. Jackie Barnett of the MDEQ revealed that records of liens are only kept for current liens, and no records of any pending, threatened, or past environmental litigation, environmental administrative procedures, or notices from government entities regarding possible

violations of environmental law or possible environmental liability, were available through her department.

2.3: Specialized Knowledge of the User

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments") (if desired), the User must provide certain information (if available) included on the User Questionnaire to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

PME provided Mr. Tom Murray, the representative of Hosco Fillings, LLC, (i.e. the User) with a copy of the User Questionnaire, which was completed and returned to PME. None of the questions were answered in the affirmative or in a manner that would suggest the potential for RECs by Mr. Murray. No other specialized knowledge or experience of the subject property was provided to PME by the User. A copy of the User Questionnaire is included in Appendix B.

2.4: Valuation Reduction for Environmental Issues

The User did not report knowledge of, or reason to anticipate, a reduction in the value of the subject property for environmental issues.

2.5: Reason for Performing this Phase I ESA

According to the User, this Phase I ESA was conducted part of environmental due diligence related to purchasing the subject property.

3.0 SUBJECT PROPERTY DESCRIPTION

3.1: Property Overview

The subject property consists of one (2) parcels containing approximately 2.37 acres and is located on the east side of Oakland Oaks Court, north of Grand River Avenue in Wixom, Michigan. The subject property is occupied by two (2) light industrial buildings; including a 14,461 square foot building, identified as 26016 Oakland Oaks Court, and a 15,000 square foot building, identified as 28026 Oakland Oaks Court. The buildings are each divided into offices, a warehouse area, a kitchen, storage areas, and restrooms. Asphalt paved parking areas and driveways are located throughout the property, with groomed grass and landscaping located in the northern and southern portion of the property, and in the right of ways. The subject buildings are currently vacant.

3.2: Subject Property Location and Zoning

The subject property is located in the Township one (1) North (T. 1N), Range eight (8) East (R. 8E), Section 7, Wixom, Oakland County, Michigan.

Review of municipal records documents that the subject property is currently zoned B-3: General Business.

Refer to Figure 1, Site Location Map; and Figure 2, Generalized Diagram of the Subject Property and Surrounding Area.

Refer to Appendix A for photographs of the subject property and surrounding properties taken during the site reconnaissance.

3.3: Government Institutional and Engineering Controls

PME has not identified any record or institutional controls or engineering controls associated with the subject property through review of reasonable ascertainable records. The owner of the property did not have any knowledge of institutional controls or engineering controls associated with the subject property.

Neither the US EPA nor Michigan Tribal Governments nor the State of Michigan maintains registries of sites with Institutional Controls/Engineering Controls in the subject property area.

3.4: Physical Setting

3.4.1: Topography

The United States Geological Survey Division (U.S.G.S.) 7.5-Minute Topographic Map of the Salem, Michigan Quadrangle, 1969 (photo revised in 1973 and 1980) for the subject property was reviewed in accordance with the ASTM standards (Figure 1). The map was reviewed to determine if conditions exist whereby hazardous substances or petroleum products migrate to or from the subject property to surface water, groundwater or soil.

Based on the topographic map, the subject property is located at an elevation of 959 feet above mean sea level. The immediate subject property area appears to slope to the west.

3.4.2: Geology

The “Hydrogeologic Atlas of Michigan”, produced by Western Michigan University and the United States Environmental Protection Agency, 1981; “Quaternary Geology of Southern Michigan”, Department of Geological Sciences, University of Michigan, Ann Arbor, Michigan (1982); and “Bedrock Geology of Southern Michigan”, Michigan Department of Natural Resources, Geological Survey Division (1987) were reviewed.

According to the aforementioned sources, in this area of Oakland County, quaternary deposits are underlain by bedrock composed of Sunbury Shale of the Paleozoic Era. Bedrock is covered by glacial outwash sand and gravel and postglacial alluvium, which consists of a pale brown to pale reddish brown, fine to coarse sand alternating with layers of small gravel to heavy cobbles, mixed lithology of sedimentary, igneous, and metamorphic rocks, well- to poorly-sorted, well-stratified, in places crossbedded. Thickness of this geology varies between 101 to 200 feet.

The subject property is outside of the scope of the Environmental Geology of Metropolitan Detroit, published by Clayton Environmental Consultants in March 1996.

According to information available from the United States Department of Agriculture, Soil Survey of Oakland County, Michigan (issued March 1982) the subject property area is generally characterized by the following soil type (Appendix C):

Marlette sandy loam, 1 to 6 percent slopes, which consists of nearly level and undulating, moderately well drained soil, found on low knolls and ridges. Typically, the surface layer is dark grayish brown sandy loam about nine (9) inches thick. The subsurface layer is yellowish brown clay loam about 23 inches thick. The substratum, to a depth of about 60 inches, consists of yellowish brown and pale brown, mottled, calcareous loam. Permeability is moderately slow in the Marlette soil. Corrosivity for uncoated steel is low, but moderate for concrete.

3.4.3: Hydrogeology

A review of topographic features/gradient may be suggestive of the hydrogeologic gradient in the immediate subject property area, since in a general way, the water table typically conforms to surface topography. Based solely on topographical features, the anticipated groundwater flow direction would be to the west.

Review of MDEQ Wellhead Protection Program documents indicates the subject property is not located within a wellhead protection zone.

4.0 HISTORICAL REVIEW

The objective of reviewing historical sources is to: (1) develop a history of previous uses or specific occupancies of the subject property and adjoining properties, (2) identify those uses or specific occupancies that are likely to have led to potential environmental concerns at the subject property, and to the extent identifiable, at adjoining properties, and (3) identify obvious uses of the subject property from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. Further, the historical review was completed to assess whether operations were conducted that involved the use, storage and/or disposal of hazardous waste, hazardous substances, and/or petroleum products.

An understanding of the subject property was obtained from reasonably ascertainable standard and other historical sources extending back to 1940. Data failure occurred prior to that date. However, PME did not identify any significant data gaps during the completion of this Phase I ESA.

4.1: Aerial Photographs and Sanborn Maps

Reasonably ascertainable aerial photography was obtained from Michigan State University Aerial Archive, East Lansing, Michigan for 1940, 1961, 1964, and 1983 (original sources unknown). PME obtained additional aerial photography from Wayne State University, Detroit, Michigan for 1949, 1956, and 1967 (original source: DTE Energy aerial archive). PME obtained

additional aerial photography from the Oakland County Planning and Economic Development Services, Pontiac, Michigan for 1963, 1974, 1980, 1990, 2000, 2005, and 2010 (original sources unknown). Relevant aerial photographs are included in Appendix C. Reference to the subject property or adjoining site usages in a particular aerial year is based on information obtained through site observations as well as standard and other historic sources. It should be noted that the scale and resolution of the aerial photographs provided for only general descriptions of the subject property and adjoining properties and limited description and discernment of site-specific features.

Sanborn Fire Insurance Maps are historical map records of fire prevention hazards for specific urban areas. These maps often provide data that sometimes can be used to determine the presence of underground and aboveground storage tanks (USTs/ASTs), type of building materials, location of flammable material storage, and types of businesses that occupied a particular site. Sanborn Fire Insurance Maps were not available for the subject property area. A certificate of “No Coverage”, provided by EDR, is included in Appendix C.

The following table summarizes the sources reviewed and the information obtained about the subject property from these sources. Information obtained about the adjoining properties from these sources is summarized in Section 8.0.

Aerial Summary for the Subject Property

Year and Source	Summary of Information
1940 Aerial (MSU)	Appears to be occupied by an orchard.
1949 Aerial (WSU)	Similar to the previous aerial year.
1956 Aerial (WSU)	Similar to the previous aerial year.
1961 Aerial (MSU)	Similar to the previous aerial year.
1963 Aerial (Oakland County)	Similar to the previous aerial year.
1964 Aerial (MSU)	Similar to the previous aerial year.
1967 Aerial (WSU)	Similar to the previous aerial year.
1974 Aerial (Oakland County)	Similar to the previous aerial year.
1980 Aerial (Oakland County)	Similar to the previous aerial year.
1983 Aerial (MSU)	The property no longer appears to be occupied by an orchard. The property appears to be vacant land.

Year and Source	Summary of Information
1990 Aerial (Oakland County)	The property no longer appears to be vacant land. Two (2) buildings have been constructed on the subject property. Similar to the current layout.
2000 Aerial (Oakland County)	Similar to the previous aerial year.
2005 Aerial (Oakland County)	Similar to the previous aerial year.
2010 Aerial (Oakland County)	Similar to the previous aerial year.

4.2: Local Street Directories

Reasonably ascertainable local street directories for Wixom, Michigan were researched. Directories were available from 1957 to 2011. Directories were researched in at least five-year increments, when available. It should not be construed that the earliest date represented is the initial date of occupancy.

PME also reviewed listings for adjoining commercial properties. Information from the listings reviewed is included in Section 8.0.

Subject Property: 26016 Oakland Oaks Court

2011-2010	Not Listed
2007	XXXX (Building present, no occupants noted)
2004	Bruce Conlon
2001-1995	Kelsey Hayes
1992-1991	Not Listed
1989-1957	Street Not Listed

Subject Property: 26026 Oakland Oaks Court

2011-2010	Not Listed
2007	XXXX (Building present, no occupants noted)
2004	Kelsey Hayes
2001-1997	Not Listed
1994-1991	Clear Print Paper
1989-1957	Street Not Listed

4.3: Assessing Department

Reasonably ascertainable assessment information provided by the City of Wixom Assessing Department was obtained and reviewed. The subject property consists of one (2) parcels

containing approximately 2.37 acres. The subject property is developed with a 15,000 square foot light building, identified as 28016 Oakland Oaks Court, constructed in 1989; and a 14,461 square foot building, identified as 28026 Oakland Oaks Court, constructed in 1989. Copies of available assessment records for the subject property and the current legal description are included in Appendix C.

4.4: Building Department

PME reviewed building records for the subject property at the City of Wixom Building Department. Building Department records documented interior renovations and/or repairs for the subject buildings throughout the 1990's and 2000's. Building Department records document the building identified as 26026 Oakland Oaks Court was occupied by Grand Oaks Associates in 1991, Kojanian Properties, LLC in 1993, and TRW in 2005. Building Department records document the building identified as 26026 Oakland Oaks Court was occupied by Kojanian Construction Corporation from 1990 until 1991, Synergy Group, a contracting company, in, and Cornerstone Building Corporation in at least 2000. Additionally, Building Department records documented the subject property was connected to municipal water and sewer in 1989. PME's review did not identify potential environmental concerns associated with the subject property.

4.5: Fire Department

PME submitted a Freedom of Information Act (FOIA) request to the City of Wixom Fire Department to review fire inspection records for the subject property. PME did not receive a response within the time constraints of this report. If PME does receive a response, and it changes the findings of the report, the client will be notified.

4.6: Health Department

PME submitted a FOIA request to the Oakland County Health Department. PME received a written response from a representative of the department indicating no files were available for the subject property.

4.7: Oil and Gas Wells

PME reviewed the MDEQ Geologic Survey Division (GSD) web site to determine if an oil and/or gas well existed previously on the subject property or surrounding area. No records of an oil and/or gas well existing on or adjacent to the subject property were identified.

4.8: Summary of Historical Use

Standard and other historical sources were able to document the first developed use of the subject property occurred prior to 1940 with an orchard. The property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The property was vacant land until the construction of the current buildings in 1989. The property was occupied by Clear Print Paper, a paper warehouse and dealer, from 1991 until 1994, various construction and contracting companies from 1990 until at least 2000, TRW, a small scale automotive parts testing operation,

from approximately 1996 until 2006, and the subject buildings have been vacant since approximately 2006. Based on the observed site conditions (i.e. floors in good condition with no damage or staining), short time frame the property was occupied by a small scale automotive parts testing operation, and lack of identification as a RCRA generator, PME has not identified the former operations as a REC.

The subject property was occupied by an orchard from prior to 1940 until between 1980 and 1983. **The long-term use of pesticides, fertilizers, other agri-chemicals, and or other petroleum products may have a residual negative impact on the soil and groundwater at the subject property, which represents a REC.**

5.0 PREVIOUS ENVIRONMENTAL REPORTS

No previous site investigations were identified by PME for the subject property. Previous reports may exist for the subject property, however, none were provided to PME by the client or owner of the property, and none were available with the appropriate state regulatory agencies.

6.0 INTERVIEWS

The objective of completing interviews with knowledgeable site contacts is to obtain information about the uses and physical characteristics of the property. In general, interviewees supported the information reviewed from other historical sources (i.e. aerial photos, city records, etc.).

6.1: Interview with Subject Property Owner

PME was unable to interview a representative of Doris Shemtob Living Trust, the current owner of the subject property, during the completion of this report. PME was not provided with contact information for the current owners by the client or the broker. Additionally, although PME attempted to obtain a name from the broker, PME was not provided with the requested information. Based on the information obtained through review of standard historical sources, PME has not identified the lack of interview with the owner as a significant data gap.

6.2: Interview with Key Site Manager

PME interviewed Mr. Joe Hauska, the broker of the subject property, regarding knowledge of the subject property. Mr. Hauska indicated the property has been vacant for 5-6 years, and the last occupant of the property was TRW, and operations included small scale automotive parts testing. No information was reported that would be considered material to identifying recognized environmental conditions in connection with the subject property.

6.3: Interview(s) with Subject Property Occupant(s)

Due to the vacant status of the subject property, there are no current occupants available for interview.

6.4: Interview(s) with Past Owner(s), Occupant(s), and Operator(s)

PME was not provided with contact information for the past owner, operators, or occupants of the subject property by the current site owner. Additionally, reasonably ascertainable information reviewed during the completion of this Phase I ESA did not identify any current contact information for former owners, operators, or occupants. Review of reasonably ascertainable records (phone directories, municipal records, etc.) did not reveal any current contact information for the former owners, operators, or occupants. Therefore, no other interviews were conducted. However, based upon PME's review of other records and documents, PME does not believe this omission presents a data gap.

6.5: Interview(s) with Others

No other interviews were completed for the subject property.

7.0 SUBJECT PROPERTY RECONNAISSANCE

The following is a summary of visual and/or physical observations of the property on the date of the site reconnaissance. Photographs from the site reconnaissance are included in Appendix A.

7.1: Methodology and Limiting Conditions

The subject property reconnaissance consisted of visual and physical observations of the subject property. PME visually and/or physically observed the periphery of the subject property. In addition, PME observed the subject property from all adjacent public thoroughfares.

Ms. Katie Ward of PME conducted the subject property reconnaissance on August 23, 2011. PME was granted access to the subject property the broker, but was not escorted during the reconnaissance. At the time of reconnaissance, weather conditions were approximately 80° F and sunny.

7.2: Descriptions of Structures and Other Improvements

The subject property is occupied by two (2) light industrial buildings; including a 14,461 square foot building, identified as 26016 Oakland Oaks Court, and a 15,000 square foot building, identified as 28026 Oakland Oaks Court. The buildings are each divided into offices, a warehouse area, a kitchen, storage areas, and restrooms.

Interior finish materials of the warehouse area include a metal deck ceilings, drywall and plastic panel walls, and a poured concrete, epoxy-coated floor. Interior finish materials of the remainder of the buildings include two (2) foot by four (4) foot ceiling tiles, drywall walls, and vinyl floor tiles and carpeting.

The concrete floors within the subject buildings appeared to be in good condition with no evidence of cracking, damage, or staining.

Asphalt paved parking areas and driveways are located throughout the property, with groomed grass and landscaping located in the northern and southern portion of the property, and in the right of ways.

7.2.1: Current Operations

The subject property is currently vacant of occupants and therefore there are no current business operations.

7.2.2: Current Hazardous Substances/Petroleum Products Usages and Storage

PME did not observe any hazardous material usage or storage during the site reconnaissance.

7.2.3: Current Interior Waste Streams

The subject property is currently vacant of occupants and therefore there are no current interior waste streams.

7.2.4: Current Exterior Waste Storage

PME did not observe any evidence of exterior debris/waste storage areas, dumpsters, land filling or dumping areas, or suspect soil piles or mounds during the site reconnaissance.

7.2.5: Current Interior Pits, Drains, Sumps and Drywells

PME did not identify any floor drains within the subject buildings, with the exceptions of floor drains located within restrooms. No staining or evidence of poor waste management practices was observed in association with the drains. The drains discharge to the municipal sewer system.

PME has not identified any interior underground pits, sumps or dry wells.

7.2.6: Current Exterior Pits, Ponds, and Lagoons

No pits, ponds, or lagoons were identified on the subject property during the site reconnaissance.

7.3: Utilities

7.3.1: Municipal Water/Water Wells

The subject property is currently connected to municipal water. PME interviewed a representative of the City of Wixom Water and Sewer Department, who indicated that the subject property was connected to municipal water in 1989, which is consistent with the initial development of the subject property. Additionally, the representative indicated the water mains for the subject property area were installed in 1988. No records of private water wells have been

identified through review of municipal records or correspondence with the Oakland County Health Department.

7.3.2: Sanitary Sewer/Septic System

The subject property is currently connected to municipal sewer. PME interviewed a representative of the City of Wixom Water and Sewer Department, who indicated that the subject property was connected to municipal sewer in 1989, which is consistent with the initial development of the subject property. Additionally, the representative indicated the sewer mains for the subject property area were installed in 1988. No records of private septic fields have been identified through review of municipal records or correspondence with the Oakland County Health Department.

According to a representative of the City of Wixom Water and Sewer Department, the sanitary and storm lines in the area of the subject property are separate.

7.3.3: Storm Water Management

PME observed several storm water catch basins on the subject property. No staining or evidence of poor waste management practices was observed in association with these exterior catch basins.

7.3.4: Heat Source

The subject property is connected to natural gas, which is supplied by Consumers Energy. Review of the Consumers Energy SIMS website indicates the subject property was initially connected to natural gas in 1989, which is consistent with the initial construction date of the current buildings. No evidence of historic fuel oil use was identified on the subject property (i.e. fill ports, vent pipes, etc.) during the site reconnaissance or through review of reasonably ascertainable records.

7.4: Underground Storage Tank (UST) Systems

Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current and historical presence of USTs on the subject property. Specifically, no records of USTs were identified through review of reasonably ascertainable records and PME did not observe any evidence of USTs (i.e. fill ports, vent pipes, etc.) during the site reconnaissance.

7.5: Aboveground Storage Tank (AST) Systems

Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current and historical presence of ASTs on the subject property.

7.6: Potential PCB Containing Materials

Older transformers and other electrical equipment could contain PCBs at a level that subjects them to regulation by the United States Environmental Protection Agency (U.S. EPA). PCBs in electrical equipment are controlled by U.S. EPA regulations 40 CFR, Part 761. The ASTM Standard requires identification of electrical or hydraulic equipment, not including light ballasts, that are known to contain PCBs or likely to contain PCBs.

During site reconnaissance, PME observed a pad-mounted transformer located to the east of the subject building identified as 28016 Oakland Oaks Court. The transformer, which is likely owned by Detroit Edison (DTE), did not contain a label indicating PCB content; however, the transformer appeared to be good condition with no evidence of leaks.

8.0 ADJOINING PROPERTIES

Through site observations, regulatory records review, and review of reasonably ascertainable standard and other historical sources for the subject property area, PME has not identified these adjoining properties to represent potential adjacent RECs to the subject property. Refer to the paragraphs below for additional information.

North Adjoining Properties

The north adjoining property, identified as 28036 Oakland Oaks Court, is occupied by FES Group, LLC, an engineering and architectural company. Review of historical sources indicates the property was developed between 1990 and 1997 with the current building. Prior to 1940 the property was vacant land. The property was occupied by WA Systems Inc. from 1997 until 2003, was vacant in at least 2006, and has been occupied by the current tenant since at least 2010. The EDR report has identified this property as a RCRA NON-GEN with no violations reported. Refer to Section 9.2 for additional information.

The northeast adjoining property, identified as 28043 Center Oaks Court, is occupied by Precitec. Review of historical sources indicates the property was developed between 1990 and 1997 with the current building. Prior to 1940 the property was vacant land. The property was occupied by Alkin Control, a tool manufacturer, in at least 1997, Kawasaki Robotics, an industrial robot and automations systems supplier, in at least 2003, Clark Lanes, Inc. in at least 2006, and the current tenant since at least 2010. Based on the lack of identification as a RCRA generator, and distance from the subject property, approximately 100 feet across Oakland Oaks Court, PME has not identified this property as a REC.

East Adjoining Properties

The northeast adjoining property, identified as 28033 Center Oaks Court, is occupied by Open Solutions. Review of historical sources indicates the property was developed between 1990 and 1997 with the current building. Prior to 1940 the property was vacant land. The property was occupied by Automation Software Inc. from 2000 until 2011, and has been occupied by Maxxar Corporation since 2006, and Open Solutions since at least 2011. Based on the lack of

identification as a RCRA generator, and office and software operations, PME has not identified this property as a REC.

The east adjoining property, identified as 28003-28023 Center Oaks Court, is occupied by two (2) light industrial buildings. Review of historical sources indicates the property was developed prior to 1940 with an orchard. The property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The property was vacant land until the construction of the current buildings in 1989. The property was occupied by various medical, engineering, marketing, and technology companies since 1991, Castrol Industrial Great Lakes in at least 1996, an automotive audio and accessory installation company from 2003 until 2006, and American Project and Repair and various other home improvement companies since 2003. The EDR report has identified this property as a RCRA NON-GEN with one (1) violation reported. Refer to Section 9.2 for additional information.

South Adjoining Property

The south adjoining property is currently vacant land. Review of historical sources indicates the property was developed prior to 1940 with an orchard. The property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The property has been vacant land since at least 1983.

West Adjoining Properties, across Oakland Oaks Court

The west adjoining property, identified as 28013 Oakland Oaks Court, is occupied by a Nextel Cellular Tower and building. Review of historical sources indicates the property was developed prior to 1940 with an orchard. The property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The property was vacant land until the construction of the current cellular tower and building between 1983 and 1990.

The southwest adjoining property, identified as 28005 Oakland Oaks Court, is occupied by Brown JIG Grinding. Review of historical sources indicates the property was developed prior to 1940 with an orchard. The property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The property was vacant land until the construction of the current building between 1990 and 1997. The property was occupied by TNT Systems in at least 1997, and has been occupied by the current tenant since at least 2000. Based on the lack of identification as a RCRA generator, and distance from the subject property, approximately 100 feet across Oakland Oaks Court, PME has not identified this property as a REC.

9.0 REGULATORY RECORDS REVIEW

PME retained EDR to provide current environmental database information compiled by a variety of federal and state regulatory agencies. The purpose of obtaining this data was to evaluate potential environmental risks associated with the subject property, adjoining sites, and other sites that are (1) identified on target lists, and (2) within varying distances of up to one mile from the subject property. Additionally, PME attempted to plot orphan sites identified within the

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environmental databases. A copy of the complete database is included in Appendix E. PME reviewed the following databases within the indicated search radii.

Type	Regulatory Agency Database	Approximate Minimum Search Distance (AMSD)	Number of Sites within AMSD
Federal	National Priority List (NPL) Sites	1 mile	0
Federal	Delisted National Priority List (DNPL) Sites	½ mile	0
Federal	Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Sites	½ mile	0
Federal	CERCLIS No Further Remediation Action Planned (NFRAP) Sites	subject property and adjoining properties	0
Federal	Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Sites	1 mile	0
Federal	RCRA non-CORRACTS Treatment, Storage or Disposal (TSD) Sites	½ mile	0
Federal	RCRA Large Quantity Generators (LQG) Sites	subject property and adjoining properties	0
Federal	RCRA Small Quantity Generators (SQG) Sites	subject property and adjoining properties	0
Federal	RCRA Conditionally Exempt Small Quantity Generators (CESQG) Sites	subject property and adjoining properties	0
Federal	RCRA Non-Generators (NON-GEN) Sites	subject property and adjoining properties	2
Federal	US Brownfield Sites	½ mile	0
Federal	Institutional Control / Engineering Control Registries	subject property	0
Federal	Environmental Response and Notification System (ERNS)	subject property	0
State & Tribal	Hazardous Waste Sites (HWS) (equivalents to NPL and CERCLIS)	1 mile	1
State & Tribal	Delisted Hazardous Waste Sites (HWS)	1 mile	1
State & Tribal	Solid Waste Facilities/Landfill Sites (SWLF)	½ mile	0
State & Tribal	Historical Landfill Sites (HIST LF)	½ mile	0
State & Tribal	Leaking Underground Storage Tank (LUST) Sites	½ mile	0
State & Tribal	Registered Underground Storage Tank (UST) Sites	subject property and adjoining properties	0
State & Tribal	Institutional Control / Engineering Control Registries	subject property	0
State & Tribal	Brownfield Sites	½ mile	0
State	Baseline Environmental Assessment (BEA) Sites	½ mile	0
Either	Unmappable Database Listings (a.k.a. Orphan Sites)	database-dependent	7

9.1: Subject Property and Occupant Listings

The subject property or its known occupants are not identified in the referenced databases.

9.2: Adjoining and Nearby Sites

PME's review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby sites. To evaluate which of the adjoining and nearby sites identified in the EDR Report present an environmental risk to the subject property, PME considered the following criteria:

- The type of database on which the site is identified.
- The topographic position of the identified site relative to the subject property.
- The direction and distance of the identified site from the subject property.
- Local soil conditions in the subject property area.
- The known or inferred groundwater flow direction in the subject property area.
- The status of the respective regulatory agency-required investigation(s) of the identified site, if any.
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes, and ditches) located between the identified site and the subject property.

Only those sites that are judged to present a potential environmental risk to the subject property and/or warrant additional clarification are further evaluated. Using the referenced criteria, and based upon a review of readily available information contained within the EDR Report, PME did not identify adjoining (i.e., bordering) or nearby sites (e.g., properties within a ¼-mile radius) listed in the EDR Report that were judged to present a potential environmental risk to the subject property, with the exception of the following:

Castrol Industrial Great Lakes – This property is identified as 28023 Center Oaks Court, Wixom, and is the east adjoining property. The EDR report has identified this property as a RCRA NON-GEN with one (1) violation reported. PME reviewed MDEQ-WHMD file information for this property, which documented violations were reported in 1996 as a result of a failure to submit a manifest and failure to have a manifest document number on the manifest. The violations were corrected within 30 days of receiving the violation. Additionally, review of WHMD records indicates operations associated with Castrol Industrial Great Lakes included distribution of cutting and grinding equipment, and wastes generated were a result of expired and/or obsolete products. Based on the corrected violations and distribution operations, PME has not identified the RCRA status as a REC.

WA Systems Inc. - This property is identified as 28036 Oakland Oaks Court, Wixom, and is the north adjoining property. The EDR report has identified this property as a RCRA NON-GEN with no violations reported. PME attempted to review MDEQ-WHMD file information for this property, however, no files were available for the property. Review of the EDR report indicates

this property was listed as a RCRA CESQG in 1997, and has been listed as a RCRA non-generator since 1998. Based on the lack of violations reported and non-generator status, PME has not identified this property as a REC.

10.0 NON-ASTM SCOPE CONSIDERATIONS

Although not required by the ASTM 1527-05 standard, based on standard industry practices PME has identified the following Non-ASTM scope considerations for the subject property.

10.1: Asbestos Containing Building Materials

U.S. EPA regulations promulgated under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) define “asbestos containing materials” and “asbestos containing building materials” (i.e., ACM and ACBM, respectively) as any material or product containing more than one (1) percent asbestos.

A survey to identify suspect ACBM was not performed as part of the Phase I ESA. However, during the site reconnaissance, PME noted through its observations of readily accessible occupant areas of the buildings the existence of building materials that should be considered as suspect for asbestos content. These materials included: two (2) foot by four (4) foot ceiling tiles, drywall walls, and vinyl floor tiles. At the time of the site reconnaissance, these materials generally appeared to be in poor condition. The poor condition of the building materials appear to be the result of water damage.

PME notes that its observations do not constitute a survey of the buildings and structures at the subject property for ACBM. Additional types of suspect ACBM may exist on-site in areas accessed or not accessible (i.e., above and behind ceilings and walls, etc.) during the site reconnaissance. In the event that additional information is desired regarding the type, location, condition and friability of ACBM at the subject property, an ACBM Survey would need to be performed. At the client’s request, PME can provide a proposal to conduct the ACBM Survey.

10.2: Lead Based Paint

A lead-based paint (LBP) survey was not requested for the subject property. Based on the construction of the buildings in 1989, it is unlikely that the exposed building surfaces that can be accessed by general occupants is classified as LBP.

10.3: Visual Mold and Moisture Damage

During the site reconnaissance, PME observed visible mold growth, damaged building materials, and standing water throughout the subject buildings. Because of the significant impact observed, mold remediation services will be required. It is recommended that a mold assessment be performed by health and safety professionals experienced in performing microbial/fungal investigations. The purpose of this assessment is to obtain sufficient information concerning the nature and extent of the mold impact and building material damage in order to prepare a mold remediation work plan that can be implemented by a mold remediation contractor.

10.4: Radon

A radon survey was not requested or required for this site.

10.5: Potential Wetlands

A wetlands investigation was not part of the scope of work for this Phase I ESA.

11.0 OPINIONS, CONCLUSIONS AND RECOMMENDATIONS

11.1: Significant Data Gaps

PME did not identify or encounter any instances of significant data gaps during the course of this ESA.

11.2: Historical Recognized Environmental Conditions (HRECs)

A historical REC, as defined in the ASTM Standard, is an environmental condition that in the past would have been identified as a REC, but has been adequately addressed and therefore no longer represents a REC. PME has not identified any historical RECs in association with the subject property.

11.3: Non ASTM Scope Considerations

PME identified the following areas of potential concern associated with the following Non ASTM Scope issues:

- PME observed suspect friable ACMs consisting of two (2) foot by four (4) foot ceiling tiles, drywall walls, and vinyl floor tiles. At the time of the site reconnaissance, these materials generally appeared to be in poor condition. The poor condition of the building materials appear to be the result of water damage. If significant interior renovation or demolition activities are planned, PME recommends that a full asbestos containing materials inspection be conducted in accordance with all applicable regulations.
- PME observed visible mold growth, damaged building materials, and standing water throughout the subject buildings. Because of the significant impact observed, mold remediation services will be required. It is recommended that a mold assessment be performed by health and safety professionals experienced in performing microbial/fungal investigations. The purpose of this assessment is to obtain sufficient information concerning the nature and extent of the mold impact and building material damage in order to prepare a mold remediation work plan that can be implemented by a mold remediation contractor.

11.4: Recognized Environmental Conditions (RECs)

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Vacant Light Industrial Property located at 28016 and 28026 Oakland Oaks Court, Wixom, Oakland County, Michigan, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except the following:

- The subject property was occupied by an orchard from prior to 1940 until between 1980 and 1983. The long-term use of pesticides, fertilizers, other agri-chemicals, and or other petroleum products may have a residual negative impact on the soil and groundwater at the subject property.

No adjoining and/or nearby RECs have been identified.

11.5: Opinions, Conclusions and Recommendations

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Vacant Light Industrial Property located at 28016 and 28026 Oakland Oaks Court, Wixom, Oakland County, Michigan, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except as listed in Section 11.4 of this report.

12.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental professional* as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



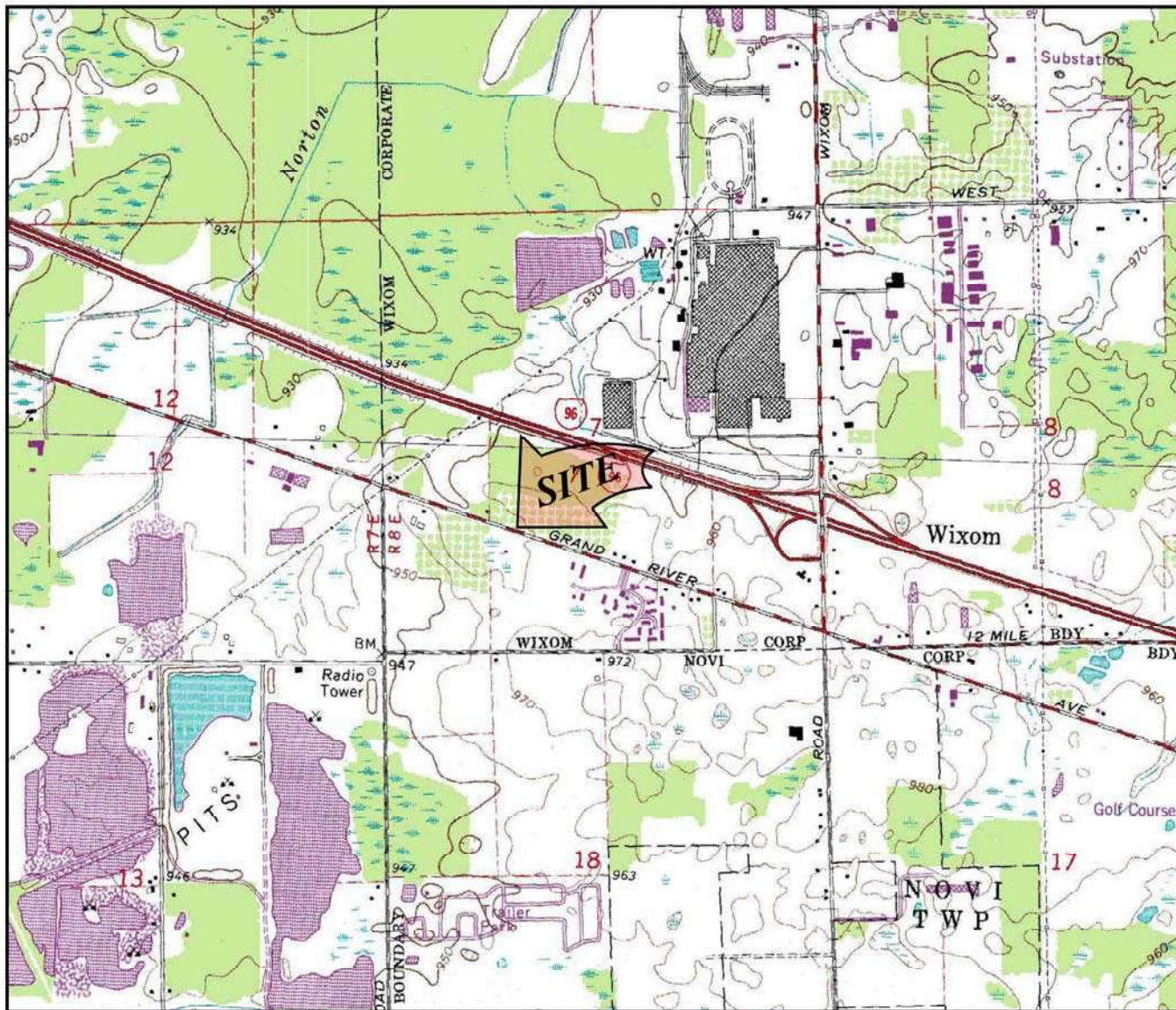
Steven E. Price, CHMM
Principal & Vice President of Due Diligence

13.0 REFERENCES

The following published sources were utilized during completion of this Phase I ESA:

- *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM, ASTM Designation E 1527-05, Published November 2005.
- Directories: Bresser's Cross-Index City Directories, Bresser's in Detroit, Michigan. City: Wixom. Years: 2011-1991.
- United States Geological Survey Division (U.S.G.S.) 7.5 Minute Topographic Map Salem, Michigan Quadrangle, 1969 (photo-revised 1973 and 1980).
- *Hydrogeologic Atlas of Michigan*, Western Michigan University and the United States Environmental Protection Agency, 1981.
- *Bedrock Geology of Southern Michigan*, Michigan Department of Natural Resources Geological Survey Division, 1987.
- *Quaternary Geology of Southern Michigan*, Department of Geological Sciences, University of Michigan, Ann Arbor, Michigan, 1982.
- *Environmental Geology of Metropolitan Detroit*, Clayton Environmental Consultants, March 1996.
- *Soil Survey of Oakland County, Michigan*, U.S. Department of Agriculture, March 1982.

Figures



6	5	4	3	2	1
7	8	9	10	11	12
13	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

T:1 N., R:8 E., Sec. 7

OAKLAND COUNTY



MICHIGAN QUADRANGLE LOCATION

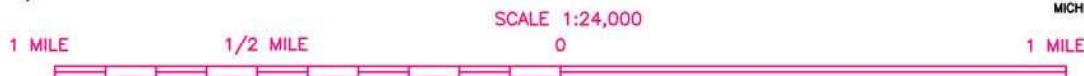


FIGURE 1

PROPERTY VICINITY MAP
USGS, 7.5 MINUTE SERIES

SALEM, MI QUADRANGLE, 1969. PHOTO REVISED 1973 & 1980.



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Web: www.pmenv.com

ISO 9001 REGISTERED

PROJ: VACANT LIGHT INDUSTRIAL
PROPERTY
28016 AND 2826 OAKLAND OAKS
COURT
WIXOM, MI

THIS IS NOT A LEGAL
SURVEY

VERIFY SCALE

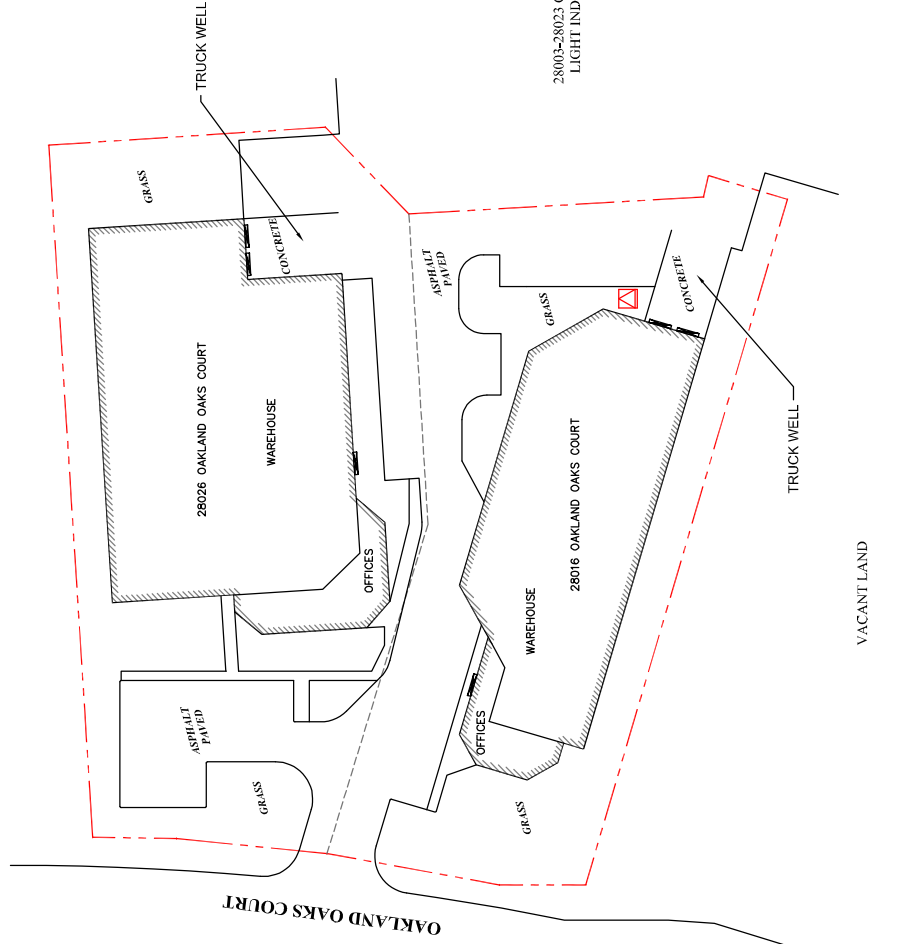
0 1"

IF NOT 1" ON THIS
SHEET, ADJUST
SCALES ACCORDINGLY.

DRN BY:	TS	DATE:	8/26/2011
CHKD BY:	KW	SCALE:	1" : 24,000'
FILE NAME:	02-5055-1F01R00		

28043 CENTER OAKS COURT
PRECITEC

28036 CENTER OAKS COURT
FES GROUP, LLC



LEGEND:

- SUBJECT PROPERTY
- PARCEL / LOT BOUNDARIES
- PAVING
- PAD MOUNTED TRANSFORMER

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ISC 9001 REGISTERED

FIGURE 2
GENERALIZED DIAGRAM OF THE SUBJECT
PROPERTY AND ADJOINING PROPERTIES

PROJECT: VACANT LIGHT INDUSTRIAL PROPERTY
28016 AND 28028 OAKLAND OAKS COURT
WIXOM, MI

THIS IS NOT A FINAL SURVEY	DATE: 8/26/2011
VERIFIED SCALE	DATE: 8/26/2011
0	DATE: 8/26/2011
60'	DATE: 8/26/2011
FILE NAME: 02-5055-1F02R00	DATE: 8/26/2011

**Environmental
Risk Management**



PM
ENVIRONMENTAL, INC.

ISO 9001 Registered

Michigan

Alabama

Florida

Tennessee

North Carolina

Mississippi

Illinois

*Phase II Environmental Site Assessment for the
Light Industrial Property located at
28026 Oakland Oaks Court, Wixom, Michigan*

PM Environmental, Inc. Project No. 02-5055-2

800.485.0090

www.pmenv.com

November 18, 2011

Mr. Tom Murray
Hosco Fittings, LLC
13123 Waco Court
Livonia, Michigan 48150

**Re: Phase II Environmental Site Assessment
Light Industrial Property
Located at 28026 Oakland Oaks Court, Wixom, Michigan
PM Environmental, Inc. Project No. 02-5055-2**



Dear Mr. Murray:

PM Environmental, Inc. (PME) has completed the Phase II Environmental Site Assessment (ESA) at the above referenced subject property on behalf of Hosco Fittings, LLC.

THIS PHASE II ESA WAS PERFORMED FOR THE EXCLUSIVE USE OF HOSCO FITTINGS, LLC AND BANK OF BIRMINGHAM, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

PME completed a Phase I ESA in 2011 which identified the followings REC:

- The subject property was occupied by an orchard from prior to 1940 until between 1980 and 1983. Orchards utilize specific herbicides and pesticides with higher metal content than traditional farm crops. The long-term use of pesticides and other agri-chemicals, may have a residual negative impact on the subsurface of the subject property.

No adjoining and/or nearby RECs have been identified.

This Phase II ESA Report summarizes the Phase II ESA activities conducted, geology encountered at the subject property, and sample analytical results.

INTRODUCTION

The subject property consists of one (1) parcel containing approximately 1.30 acres and is located on the east side of Oakland Oaks Court, north of Grand River Avenue in Wixom, Michigan. The subject property is occupied by a 22,018 square foot building, identified as 28026 Oakland Oaks Court. The building is divided into offices, a warehouse area, a kitchen, storage areas, and restrooms. Asphalt paved parking areas and driveways are located throughout the property, with groomed grass and landscaping located in the northern and southern portion of the property, and in the right of ways. The subject building is currently vacant.

Standard and other historical sources were able to document the first developed use of the subject property occurred prior to 1940 with an orchard. The property was occupied by an

MICHIGAN

CORPORATE LANSING

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METRO DETROIT

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Phone 248.336.9988

GRAND RAPIDS

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Phone 616.285.8857

ALABAMA

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Phone 256.353.6222

1609 Mockingbird Court • Florence, AL 35630
Phone 256.353.6222

FLORIDA

20715 SW 120th Court • Miami, FL 33177
Phone 888.763.6835

NORTH CAROLINA

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Phone 704.782.0555

TENNESSEE

535 Chestnut Street, Suite F-14 • Chattanooga, TN 37402
Phone 423.468.1105

254 West Eastland Street • Gallatin, TN 37066
Phone 615.390.3776

1053 Oak Hill Drive • Cookeville, TN 38501
Phone 931.432.5552

orchard from prior to 1940 until between 1980 and 1983. The property was vacant land until the construction of the current building in 1989. The property was occupied by Clear Print Paper, a paper warehouse and dealer, from 1991 until 1994, various construction and contracting companies from 1990 until at least 2000, TRW, a small scale automotive parts testing operation, from approximately 1996 until 2006, and the subject building has been vacant since approximately 2006.

A site vicinity diagram is presented in Figure 1. A scaled site diagram depicting the subject property and adjoining properties is presented in Figure 2.

PHASE II ESA SITE INVESTIGATION

On November 16, 2011, PME conducted a Phase II ESA at the subject property that consisted of the advancement of four (4) soil borings (SB-1 through SB-4) to a depth of 6.0 feet below ground surface (bgs) and the collection of six (6) soil samples to evaluate the REC identified in PME's Phase I ESA. The soil boring locations are depicted on Figure 3.

Specifically, the Phase II ESA activities were conducted on the following areas of the subject property:

Description of Soil Boring Locations

Location (Total Depth)	Soil Sample Depth (feet bgs)	Analysis	Objectives	Soil/Groundwater Sample Selection (justification)
SB-1 (4.0)	0.5-1.5	Arsenic and lead	Assess the former orchard.	Soil: Due to the lack of visual/olfactory evidence of contamination, a shallow soil sample was collected. Groundwater: Not encountered.
SB-2 (6.0)	0.5-1.5 and 5.0-6.0	Arsenic and lead	Assess the former orchard.	Soil: Due to the lack of visual/olfactory evidence of contamination, shallow and deep soil samples were collected. Groundwater: Not encountered.
SB-3 (6.0)	0.5-1.5 and 4.0-5.0	Arsenic and lead	Assess the former orchard.	Soil: Due to the lack of visual/olfactory evidence of contamination, shallow and deep soil samples were collected. Groundwater: Not encountered.
SB-4 (5.0)	0.5-1.5	Arsenic and lead	Assess the former orchard.	Soil: Due to the lack of visual/olfactory evidence of contamination, a shallow soil sample was collected. Groundwater: Not encountered.

GEOLOGY/HYDROGEOLOGY

Review of soil boring logs indicate the site specific stratigraphy consists of medium dense clay to a depth of 6.0 feet bgs, the maximum depth explored. No groundwater was encountered to the maximum depth.

Appendix A contains the soil boring log, which depicts a site specific geologic profile and soil sample intervals.

ANALYTICAL RESULTS

The soil samples were submitted to Brighton Analytical, Inc., Brighton, Michigan for laboratory analysis of arsenic and lead. The analytical results for the soil samples that exceeded laboratory method detection limits (MDLs) were compared to the State of Michigan Part 201 Generic Cleanup Criteria (GCC) and Screening Levels as presented in Attachment 1 to MDEQ Operational Memorandum Number 1 "Part 201 Cleanup Criteria and Part 213 Risk-Based Screening Levels," March 25, 2011, using the Residential and Non-Residential cleanup criteria. The soil analytical results are summarized in Table 1 with a comparison to the Part 201 GCC, and depicted on Figure 3. Appendix B contains the laboratory analytical report.

Summary of Soil Exceedences

Location (Total Depth)	Soil Sample Depth (feet bgs)	Analysis	Objectives	Soil Exceedance Above Nonresidential GCC
SB-1 (4.0)	0.5-1.5	Arsenic and lead	Assess the former orchard.	NONE
SB-2 (6.0)	0.5-1.5 and 5.0-6.0	Arsenic and lead	Assess the former orchard.	NONE
SB-3 (6.0)	0.5-1.5 and 4.0-5.0	Arsenic and lead	Assess the former orchard.	NONE
SB-4 (5.0)	0.5-1.5	Arsenic and lead	Assess the former orchard.	NONE

Analytical results document concentrations of arsenic and lead above the method detection limits (MDLs) in each of the soil samples collected. All of the concentrations of lead were below the statewide default background level (SDBL), with the exception of the concentration identified in SB-2 (5.0-6.0); however, the concentration was below the most restrictive Part 201 generic cleanup criteria (GCC).

The arsenic concentrations in the shallow and deep samples ranged from 8,100 and 11,000 µg/Kg, which are above the current SDBL of 5,800 µg/Kg but are within levels being considered by the MDEQ for a regional background of 12,000-16,000 µg/Kg. Additionally, based on the distribution of the concentrations, both in the shallow and deep samples, the concentrations appear to be representative of background levels. Arsenic was commonly used as a pesticide for orchards and the arsenic concentrations detected at the subject property are indicative of levels that could be found at an orchard where arsenic was applied for agricultural pesticide

applications. However, the uniform distribution and the lack of significantly elevated concentrations (i.e., 50,000 µg/Kg) suggest the application was done in a manner “according to generally accepted agricultural and management practices”, which means that the arsenic, although present above both the current background levels and Part 201 Residential DC GCC is not considered a “release” as defined under Section 20101 (II) (iv) of Part 201. Refer to Appendix C for information provided by the MDEQ regarding proposed arsenic statewide background levels.

SUMMARY

Based on PME’s Phase II ESA, the concentrations of target analytes were not identified at the subject property in a manner that would be considered a release. Additionally, the distribution of concentrations is representative of background levels and is within a range which is under consideration for background levels in this region of Michigan; therefore, in PME’s opinion the subject property is not classified as a “facility,” as defined by Part 201 of P.A. 451 of the Michigan Natural Resources Environmental Protection Act (NREPA).

In PME’s opinion, the soil borings advanced by PME at the subject property were adequate to address the REC identified in PME’s Phase I ESA completed in September 2011 and no further investigation is warranted.

This report has been reviewed for its completeness and accuracy. If you have any questions related to this letter report please do not hesitate to contact our office at (248) 336-9988.

REPORT PREPARED BY:
PM Environmental, Inc.



Jamie Antoniewicz
Staff Engineer

REPORT REVIEWED BY:
PM Environmental, Inc.



Michael T. Kulka, P.E.
Principal

FIGURES AND TABLES

- Figure 1: Site Location Map
Figure 2: Generalized Diagram of the Subject Property and Adjoining Properties
Figure 3: Soil Boring Location Map with Soil Analytical Results

- Table 1: Summary of Soil Analytical Results – Arsenic and Lead

APPENDICES

- Appendix A: Soil Boring Logs
Appendix B: Laboratory Analytical Results
Appendix C: MDEQ Correspondence

Tables

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ARSENIC AND LEAD
28026 OAKLAND OAKS COURT, WIXOM, MICHIGAN
PME PROJECT # 02-5055-2

ARSENIC AND LEAD (µg/Kg)			Arsenic	Lead
Chemical Abstract Service Number (CAS#)			7440382	7439921
Sample ID	Sample Date	Sample Depth (bgs)		
SB-1	11/16/11	0.5'-1.5'	10,000	12,000
SB-2	11/16/11	0.5'-1.5'	11,000	20,000
SB-2	11/16/11	5.0-6.0'	10,000	26,000
SB-3	11/16/11	0.5'-1.5'	11,000	10,000
SB-3	11/16/11	4.0-5.0'	8,300	9,800
SB-4	11/16/11	0.5'-1.5'	8,100	13,000
Operational Memorandum No. 1: Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels (RBSLs), Attachment 1: Soil Tables 2 and 3 Residential and Nonresidential Part 201 Generic Cleanup Criteria and Screening Levels; Part 213 Tier 1 RBSLs, March 25, 2011				
Residential (µg/Kg)				
Statewide Default Background Levels			5,800	21,000
Drinking Water Protection (DWP)			4,600	7.0E+5
Groundwater Surface Water Interface Protection (GSIP)			4,600	{G,X}
GSIP Human Drinking Water			NA	{G,X}
Groundwater Contact Protection (GCP)			2.0E+6	ID
Soil Volatilization to Indoor Air Inhalation (SVII)			NLV	NLV
Ambient Air Infinite Source Volatile Soil Inhalation (VSI)			NLV	NLV
Ambient Air Finite VSI for 5 Meter Source Thickness			NLV	NLV
Ambient Air Finite VSI for 2 Meter Source Thickness			NLV	NLV
Ambient Air Particulate Soil Inhalation (PSI)			7.2E+5	1.0E+8
Direct Contact (DC)			7,600	4.0E+5
Nonresidential (µg/Kg)				
Drinking Water Protection (Nonres DWP)			4,600	7.0E+5
Soil Volatilization to Indoor Air Inhalation (Nonres SVII)			NLV	NLV
Ambient Air Infinite Source Volatile Soil Inhalation (Nonres VSI)			NLV	NLV
Ambient Air Finite VSI for 5 Meter Source Thickness			NLV	NLV
Ambient Air Finite VSI for 2 Meter Source Thickness			NLV	NLV
Ambient Air Particulate Soil Inhalation (Nonres PSI)			9.1E+5	4.4E+7
Direct Contact (Nonres DC)			37,000	9.0E+5 (DD)
Screening Levels (µg/Kg)				
Soil Saturation Concentration Screening Levels (Csat)			NA	NA

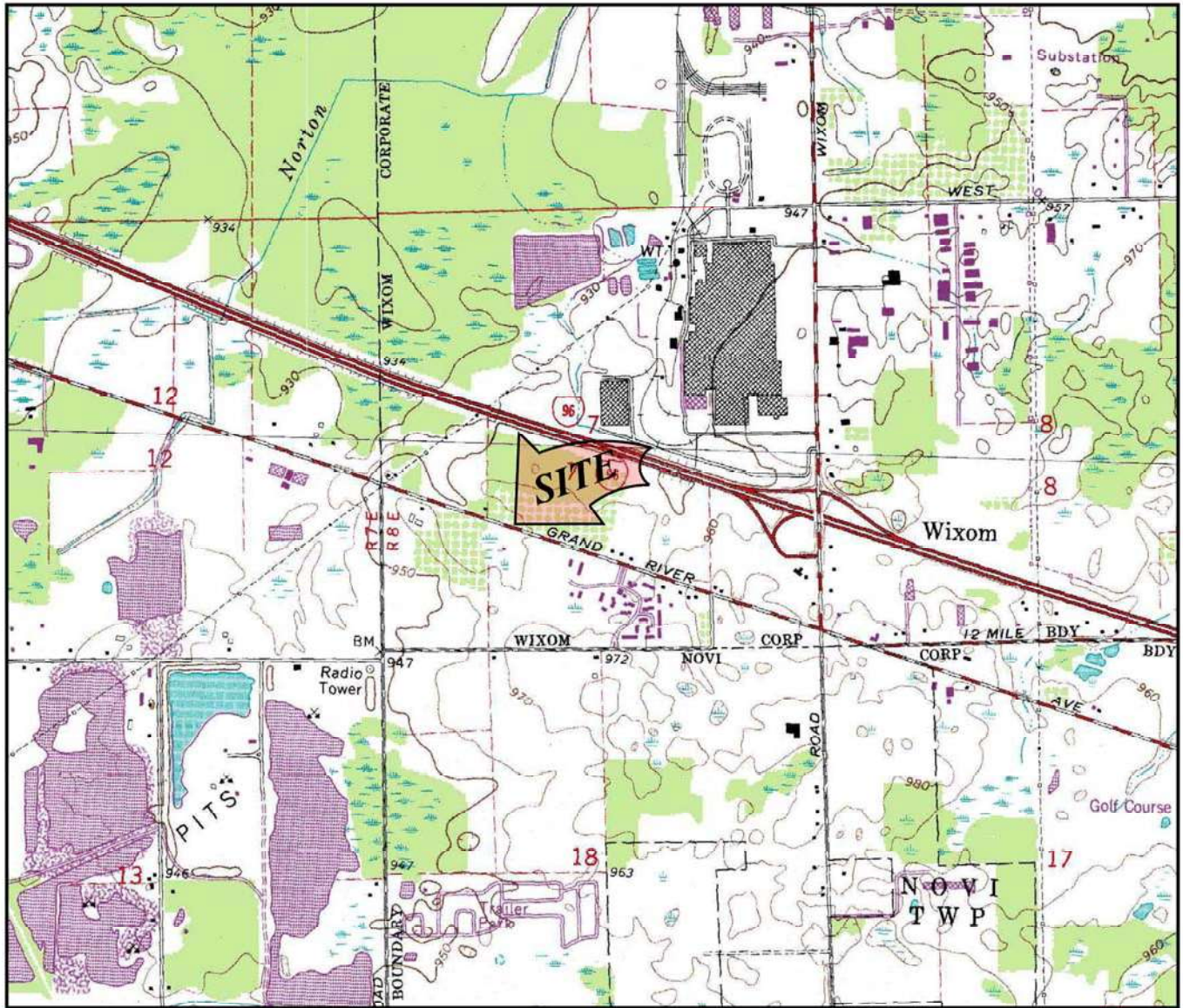
Applicable Criterion/RBSL Exceeded

BOLD Value Exceeds Applicable Criterion/RBSL

bgs Below Grade Surface (feet)

1 Maximum of analyzed or calculated total lead value.

Figures



6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

T:1 N., R:8 E., Sec. 7

OAKLAND COUNTY

SCALE 1:24,000
0

1 MILE 1/2 MILE 1 MILE

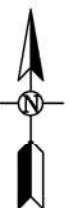


MICHIGAN QUADRANGLE LOCATION

FIGURE 1

PROPERTY VICINITY MAP
USGS, 7.5 MINUTE SERIES

SALEM, MI QUADRANGLE, 1969. PHOTO REVISED 1973 & 1980.



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Web: www.pmenv.com

ISO 9001 REGISTERED

PROJ: VACANT LIGHT INDUSTRIAL
PROPERTY
28016 AND 2826 OAKLAND OAKS
COURT
WIXOM, MI

THIS IS NOT A LEGAL
SURVEY

VERIFY SCALE

0 1"

IF NOT 1" ON THIS
SHEET, ADJUST
SCALES ACCORDINGLY.

DRN BY: TS DATE: 8/26/2011

CHKD BY: KW/JA SCALE: 1" : 24,000'

FILE NAME: 02-5055-2F01R00

28043 CENTER OAKS COURT
PRECITEC

28036 CENTER OAKS COURT
FES GROUP, LLC

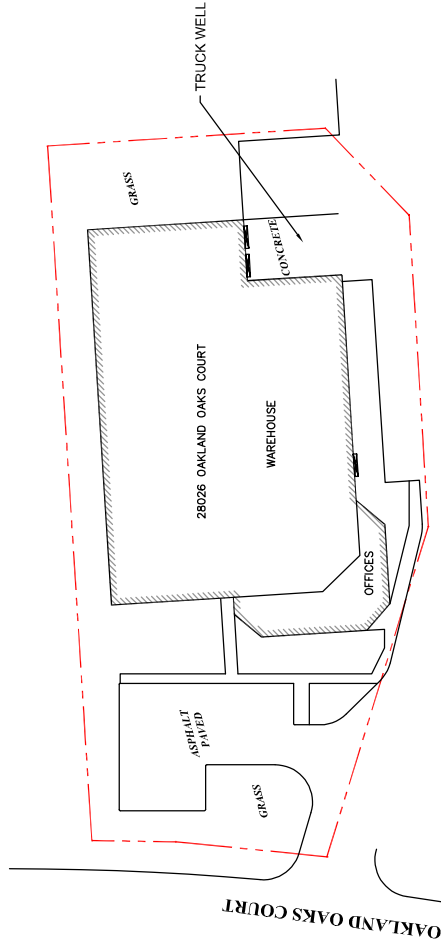
28033 CENTER OAKS COURT
OPEN SOLUTIONS
MAXXAR

28013 CENTER OAKS COURT
NEXTEL TOWER

28005 CENTER OAKS COURT
BROWN JIG GRINDING

28003-28023 CENTER OAKS COURT
LIGHT INDUSTRIAL PROPERTY

VACANT LAND



LEGEND:

- SUBJECT PROPERTY
- PARCEL / LOT BOUNDARIES
- BAYDOOR
- PAD MOUNTED TRANSFORMER



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FIGURE 2
GENERALIZED DIAGRAM OF THE SUBJECT
PROPERTY AND ADJOINING PROPERTIES

PROJ:	VACANT LIGHT INDUSTRIAL PROPERTY 2826 OAKLAND OAKS COURT WIXOM, MI		
THIS IS NOT A LEGAL SURVEY	DATE:	TS	11/18/2011
VERTICAL SCALE	CHKD BY:	KW/JA	SCALE: 1" = 60'
# OF SHEETS: 10 THIS SHEET: 01 OF 10	FILE NAME:	02-5055-2F02R00	

28043 CENTER OAKS COURT
PRECITEC

28036 CENTER OAKS COURT
FES GROUP, LLC

28033 CENTER OAKS COURT
OPEN SOLUTIONS
MAXXAR

28013 CENTER OAKS COURT
NEXTEL TOWER

28005 CENTER OAKS COURT
BROWN JIG GRINDING

SB-4
11/16/2011
0.5-1.5
As
Pb
8,100
13,000

GRASS
SB-4

TRUCK WELL

28026 OAKLAND OAKS COURT

WAREHOUSE

OFFICES

ASPHALT
PAVED

GRASS

OAKLAND OAKS COURT

28003-28023 CENTER OAKS COURT
LIGHT INDUSTRIAL PROPERTY

SB-3
11/16/2011
0.5-1.5
As
Pb
1,000
10,000
8,300
9,500

SB-2
11/16/2011
0.5-1.5
As
Pb
1,000
20,000
16,000
20,000

SB-1
11/16/2011
0.5-1.5
As
Pb
0,000
12,000

LEGEND:

- SUBJECT PROPERTY
- PARCEL / LOT BOUNDARIES
- BAYDOOR
- PAD MOUNTED TRANSFORMER



ISO 9001 REGISTERED

FIGURE 3
SOIL BORING LOCATION MAP WITH
ANALYTICAL RESULTS

PROJ: VACANT LIGHT INDUSTRIAL PROPERTY
2826 OAKLAND OAKS COURT
WIXOM, MI

THIS IS NOT A FINAL SUBMITTAL	DATE: 11/18/2011
VERIFIED SCALE	CHKD BY: TS
0	SCALE: 1" = 60'
# OF SHEETS: 10	FILE NAME: 02-5055-2F03R00
# OF SHEETS: 10	SCALE: ACCURACY

Appendix D

ENVIRONMENTAL DATABASE SEARCH

28016 Oakland Oaks Crt

28016 Oakland Oaks Crt

Wixom, MI 48393

Inquiry Number: 05099672.2r

November 07, 2017

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	41
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

28016 OAKLAND OAKS CRT
WIXOM, MI 48393

COORDINATES

Latitude (North):	42.4979270 - 42° 29' 52.53"
Longitude (West):	83.5488040 - 83° 32' 55.69"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	290555.7
UTM Y (Meters):	4707997.0
Elevation:	960 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6066326 SALEM, MI
Version Date:	2014
North Map:	6066304 MILFORD, MI
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140705
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
28016 OAKLAND OAKS CRT
WIXOM, MI 48393

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	KELSEY-HAYES COMPANY	28016 OAKLAND OAKS C	WDS		TP
A2	HOSCO FITTINGS LLC	28026 OAKLAND OAKS C	RCRA-CESQG	Lower	65, 0.012, NW
B3	W A SYSTEMS INC	28036 OAKLAND OAKS C	RCRA NonGen / NLR, FINDS, ECHO	Lower	209, 0.040, NNW
4	PANDA PRECISION	2840 OAKLAND OAKS CT	RCRA NonGen / NLR	Lower	230, 0.044, SW
B5	WAGON AUTOMOTIVE INC	28025 OAKLAND OAKS C	RCRA NonGen / NLR	Lower	328, 0.062, NNW
C6	PRECITEC INC	28043 CENTER OAKS CT	RCRA-CESQG	Lower	375, 0.071, NE
7	CASTROL INDUSTRIAL G	28023 CENTER OAKS CT	RCRA NonGen / NLR, FINDS, ECHO	Lower	382, 0.072, ENE
C8	ESTRAKON INC	28059 CENTER OAKS CT	RCRA-CESQG, FINDS, ECHO	Lower	470, 0.089, NE
9	WAGON AUTOMOTIVE INC	51000 GRAND RIVER AV	RCRA NonGen / NLR	Lower	595, 0.113, WNW
10	STANDFAST INDUSTRIES	28024 CENTER OAKS CT	RCRA NonGen / NLR	Lower	603, 0.114, East
D11	MICHIGAN TRACTOR AND	28004 CENTER OAKS CT	RCRA NonGen / NLR	Higher	623, 0.118, ESE
D12	MILANO INDUSTRIES, I	28004 CENTER OAKS CO	SWRCY, WDS	Higher	623, 0.118, ESE
13	PPG BUSINESS DEVELOP	28066 OAKLAND OAKS C	RCRA-CESQG, FINDS, ECHO	Lower	690, 0.131, North
E14	SUPERABRASIVES INC	28047 GRAND OAKS CT	RCRA-CESQG	Lower	934, 0.177, East
15	VENTURA AEROSPACE LL	51170 GRAND RIVER AV	RCRA-CESQG	Lower	997, 0.189, West
E16	MATHREAD INC	28061 GRAND OAKS CT	RCRA NonGen / NLR	Lower	1048, 0.198, ENE
17	28011 GRAND OAKS COU	28011 GRAND OAKS COU	US BROWNFIELDS, FINDS	Lower	1146, 0.217, ESE
18	FORD MOTOR CO WIXOM	28801 SOUTH WIXOM RD	AUL, PART 201, INVENTORY	Lower	4370, 0.828, NE
19	PAVEMENT SEALANTS	29420 WIXOM ROAD	DEL PART 201	Lower	4785, 0.906, NE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KELSEY-HAYES COMPANY 28016 OAKLAND OAKS C WIXOM, MI 48393	WDS WMD Id: 445252 Site Id: MIG000036123	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators

EXECUTIVE SUMMARY

RCRA-SQG..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List

US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Facilities Database

State and tribal leaking storage tank lists

LUST..... Leaking Underground Storage Tank Sites

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

UST..... Underground Storage Tank Facility List

AST..... Aboveground Tanks

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

AUL..... Engineering and Institutional Controls

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields and UST Site Database

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF..... Inactive Solid Waste Facilities

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI..... Open Dump Inventory

IHS OPEN DUMPS..... Open Dumps on Indian Land

EXECUTIVE SUMMARY

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
INVENTORY..... Inventory of Facilities
CDL..... Clandestine Drug Lab Listing
US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS..... Lien List
LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS..... Pollution Emergency Alerting System

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines
FINDS..... Facility Index System/Facility Registry System
DOCKET HWC..... Hazardous Waste Compliance Docket Listing
ECHO..... Enforcement & Compliance History Information

EXECUTIVE SUMMARY

UXO.....	Unexploded Ordnance Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
AIRS.....	Permit and Emissions Inventory Data
ASBESTOS.....	ASBESTOS
BEA.....	Baseline Environmental Assessment Database
COAL ASH.....	Coal Ash Disposal Sites
DRYCLEANERS.....	Drycleaning Establishments
Financial Assurance.....	Financial Assurance Information Listing
LEAD.....	Lead Safe Housing Registry
NPDES.....	List of Active NPDES Permits
UIC.....	Underground Injection Wells Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historic Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historic Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA PART 201.....	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 09/13/2017 has revealed that there are

EXECUTIVE SUMMARY

6 RCRA-CESQG sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HOSCO FITTINGS LLC	28026 OAKLAND OAKS C	NW 0 - 1/8 (0.012 mi.)	A2	8
PRECITEC INC	28043 CENTER OAKS CT	NE 0 - 1/8 (0.071 mi.)	C6	15
ESTRAKON INC	28059 CENTER OAKS CT	NE 0 - 1/8 (0.089 mi.)	C8	19
PPG BUSINESS DEVELOP	28066 OAKLAND OAKS C	N 1/8 - 1/4 (0.131 mi.)	13	27
SUPERABRASIVES INC	28047 GRAND OAKS CT	E 1/8 - 1/4 (0.177 mi.)	E14	29
VENTURA AEROSPACE LL	51170 GRAND RIVER AV	W 1/8 - 1/4 (0.189 mi.)	15	32

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/19/2017 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
28011 GRAND OAKS COU	28011 GRAND OAKS COU	ESE 1/8 - 1/4 (0.217 mi.)	17	35

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling center locations.

A review of the SWRCY list, as provided by EDR, and dated 09/25/2017 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MILANO INDUSTRIES, I	28004 CENTER OAKS CO	ESE 0 - 1/8 (0.118 mi.)	D12	26

Local Lists of Hazardous waste / Contaminated Sites

PART 201: A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

A review of the PART 201 list, as provided by EDR, and dated 10/01/2013 has revealed that there is 1

EXECUTIVE SUMMARY

PART 201 site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORD MOTOR CO WIXOM Facility Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring) Facility ID: 63000022	28801 SOUTH WIXOM RD	NE 1/2 - 1 (0.828 mi.)	18	38

DEL PART 201: A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion. A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

A review of the DEL PART 201 list, as provided by EDR, and dated 08/01/2013 has revealed that there is 1 DEL PART 201 site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PAVEMENT SEALANTS Facility Id: 63000132	29420 WIXOM ROAD	NE 1/2 - 1 (0.906 mi.)	19	40

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

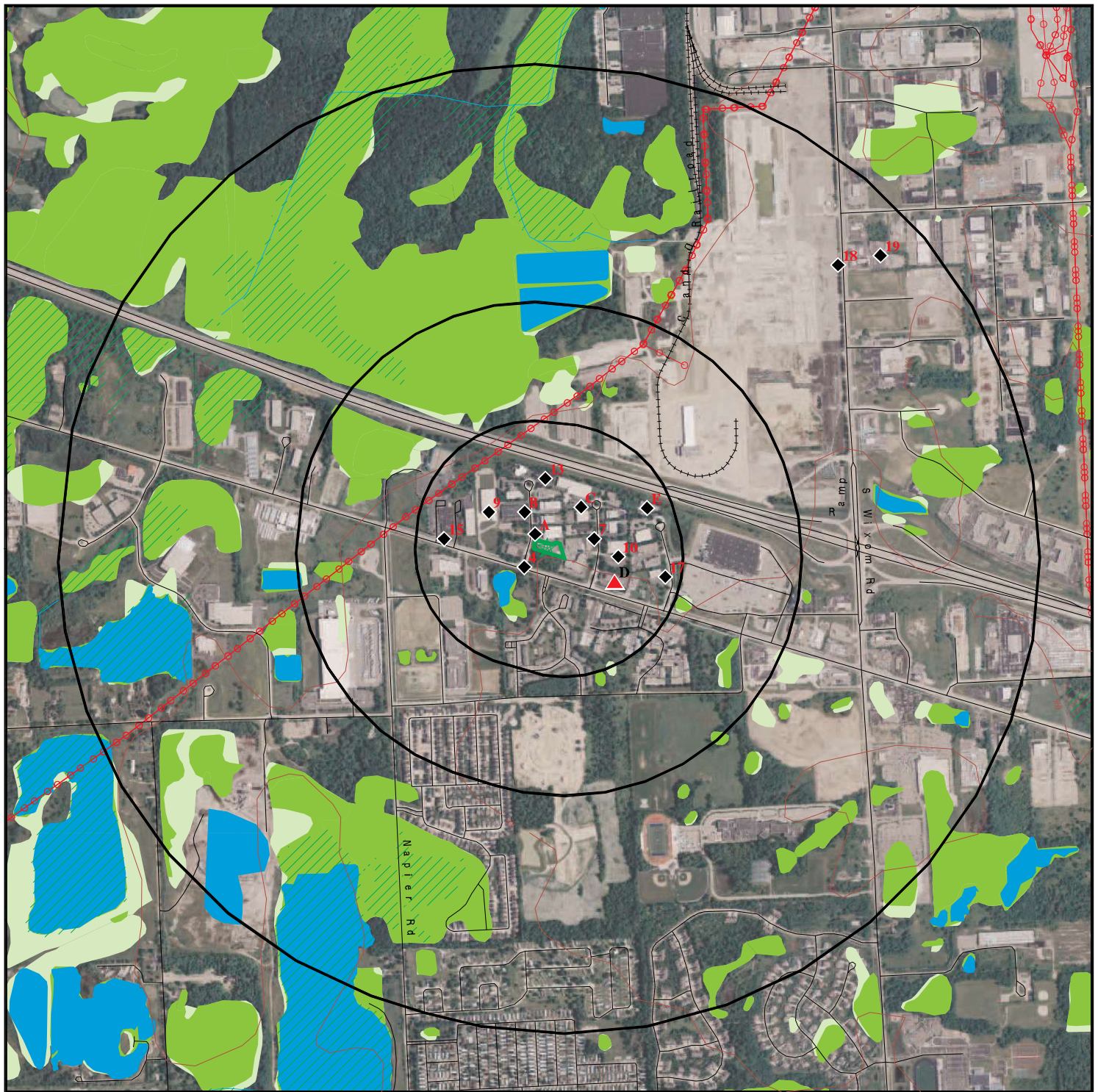
A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/13/2017 has revealed that there are 8 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MICHIGAN TRACTOR AND	28004 CENTER OAKS CT	ESE 0 - 1/8 (0.118 mi.)	D11	24
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
W A SYSTEMS INC	28036 OAKLAND OAKS C	NNW 0 - 1/8 (0.040 mi.)	B3	10
PANDA PRECISION	2840 OAKLAND OAKS CT	SW 0 - 1/8 (0.044 mi.)	4	12
WAGON AUTOMOTIVE INC	28025 OAKLAND OAKS C	NNW 0 - 1/8 (0.062 mi.)	B5	13
CASTROL INDUSTRIAL G	28023 CENTER OAKS CT	ENE 0 - 1/8 (0.072 mi.)	7	17
WAGON AUTOMOTIVE INC	51000 GRAND RIVER AV	WNW 0 - 1/8 (0.113 mi.)	9	21
STANDFAST INDUSTRIES	28024 CENTER OAKS CT	E 0 - 1/8 (0.114 mi.)	10	23
MATHREAD INC	28061 GRAND OAKS CT	ENE 1/8 - 1/4 (0.198 mi.)	E16	34

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 05099672.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

0 1/4 1/2 1 Miles



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 28016 Oakland Oaks Crt
ADDRESS: 28016 Oakland Oaks Crt
Wixom MI 48393
LAT/LONG: 42.497927 / 83.548804

CLIENT: PM Environmental, Inc.
CONTACT: Hope Wojack
INQUIRY #: 05099672.2r
DATE: November 07, 2017 1:58 pm

DETAIL MAP - 05099672.2R



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 28016 Oakland Oaks Crt
 ADDRESS: 28016 Oakland Oaks Crt
 Wixom MI 48393
 LAT/LONG: 42.497927 / 83.548804

CLIENT: PM Environmental, Inc.
 CONTACT: Hope Wojack
 INQUIRY #: 05099672.2r
 DATE: November 07, 2017 2:01 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		3	3	NR	NR	NR	6
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	1	0	NR	NR	1
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		1	0	0	NR	NR	1
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
PART 201	1.000		0	0	0	1	NR	1
INVENTORY	0.500		0	0	0	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
DEL PART 201	1.000		0	0	0	1	NR	1
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		7	1	NR	NR	NR	8
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
BEA	0.500		0	0	0	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
LEAD	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
WDS	TP	1	NR	NR	NR	NR	NR	1

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000	0	0	0	0	NR	0
EDR Hist Auto	0.125	0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125	0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA PART 201	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		1	11	5	0	2	0	19

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
Target
Property

KELSEY-HAYES COMPANY
28016 OAKLAND OAKS CT
WIXOM, MI 48393

WDS **S111961281**
N/A

Site 1 of 2 in cluster A

Actual:
960 ft.

WDS:
Site Id: MIG000036123
WMD Id: 445252
Site Specific Name: KELSEY HAYES COMPANY
Mailing Address: 28016 OAKLAND OAKS CT
Mailing City/State/Zip: 48393
Mailing County: OAKLAND

A2
NW
< 1/8
0.012 mi.
65 ft.

HOSCO FITTINGS LLC
28026 OAKLAND OAKS CT
WIXOM, MI 48393

RCRA-CESQG **1015744005**
MIK222290249

Site 2 of 2 in cluster A

Relative:
Lower

RCRA-CESQG:
Date form received by agency: 11/02/2012
Facility name: HOSCO FITTINGS LLC
Facility address: 28026 OAKLAND OAKS CT
WIXOM, MI 48393
EPA ID: MIK222290249
Contact: KEVIN STACY
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 248-912-1757
Contact email: KSTACY@HOSCO.NET
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: TOM MURRAY
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HOSCO FITTINGS LLC (Continued)

1015744005

Owner/Operator Type: Owner
Owner/Op start date: 05/17/2012
Owner/Op end date: Not reported

Owner/operator name: TOM MURRAY
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/17/2012
Owner/Op end date: Not reported

Owner/operator name: JAN PITZER
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/17/2012
Owner/Op end date: Not reported

Owner/operator name: KEVIN STACY
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/17/2012
Owner/Op end date: Not reported

Owner/operator name: JAN PITZER
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/17/2012
Owner/Op end date: Not reported

Owner/operator name: KEVIN STACY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HOSCO FITTINGS LLC (Continued)

1015744005

Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/17/2012
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 12/31/2011
Site name: HOSCO FITTINGS LLC
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

B3
NNW
< 1/8
0.040 mi.
209 ft.

W A SYSTEMS INC
28036 OAKLAND OAKS CT
WIXOM, MI 48393

Site 1 of 2 in cluster B

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 09/17/1998
Facility name: W A SYSTEMS INC
Facility address: 28036 OAKLAND OAKS CT
WIXOM, MI 48393
EPA ID: MIR000026443
Contact: JACK YARMAK
Contact address: 28036 OAKLAND OAKS CT
WIXOM, MI 48393
Contact country: US

Actual:
958 ft.

RCRA NonGen / NLR **1001232523**
FINDS **MIR000026443**
ECHO

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

W A SYSTEMS INC (Continued)

1001232523

Contact telephone: 248-380-7770
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ORA HATCHER
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Owner/operator name: ORA HATCHER
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 08/04/1997
Site name: W A SYSTEMS INC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

W A SYSTEMS INC (Continued)

1001232523

Classification: Conditionally Exempt Small Quantity Generator

Waste code: D001

Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003702501

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1001232523

Registry ID: 110003702501

DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110003702501>

4
SW
< 1/8
0.044 mi.
230 ft.

PANDA PRECISION
2840 OAKLAND OAKS CT
WIXOM, MI 48393

RCRA NonGen / NLR

1007099702
MIK717448690

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 06/18/2001

Facility name: PANDA PRECISION

Facility address: 2840 OAKLAND OAKS CT

WIXOM, MI 48393

EPA ID: MIK717448690

Contact: TODD MAHSON

Contact address: 2840 OAKLAND OAKS CT

WIXOM, MI 48393

Contact country: US

Contact telephone: 248-449-0950

Contact email: Not reported

EPA Region: 05

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: PANDA PRECISION

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PANDA PRECISION (Continued)

1007099702

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 06/18/2001
Owner/Op end date: Not reported

Owner/operator name: PANDA PRECISION
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/18/2001
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

B5
NNW
< 1/8
0.062 mi.
328 ft.

WAGON AUTOMOTIVE INC
28025 OAKLAND OAKS CT
WIXOM, MI 48393

RCRA NonGen / NLR 1008881082
MIK791348238

Site 2 of 2 in cluster B

Relative:
Lower

RCRA NonGen / NLR:
Date form received by agency: 09/12/2005
Facility name: WAGON AUTOMOTIVE INC
Facility address: 28025 OAKLAND OAKS CT
WIXOM, MI 48393

EPA ID: MIK791348238
Contact: DEBRA GONZALES
Contact address: 28025 OAKLAND OAKS CT
WIXOM, MI 48393
Contact country: US

Actual:
957 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WAGON AUTOMOTIVE INC (Continued)

1008881082

Contact telephone: 248-262-3188
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: WAGON AUTOMOTIVE INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2005
Owner/Op end date: Not reported

Owner/operator name: WAGON AUTOMOTIVE INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/2005
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

C6
NE
< 1/8
0.071 mi.
375 ft.

PRECITEC INC
28043 CENTER OAKS CT
WIXOM, MI 48393

RCRA-CESQG

1016958060
MIK131450072

Site 1 of 2 in cluster C

Relative:
Lower

RCRA-CESQG:

Date form received by agency: 10/08/2014

Facility name: PRECITEC INC

Facility address: 28043 CENTER OAKS CT

WIXOM, MI 48393

EPA ID: MIK131450072

Contact: ROBERT N BORGSTROM

Contact address: Not reported

Not reported

Contact country: Not reported

Contact telephone: 248-446-8100

Contact email: ROBERTB@PRECITEC.COM

EPA Region: 05

Land type: Private

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: ROBERT BORGSTROM

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 06/01/2007

Owner/Op end date: Not reported

Owner/operator name: PRECITEC INC

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PRECITEC INC (Continued)

1016958060

Owner/Operator Type: Owner
Owner/Op start date: 06/01/2007
Owner/Op end date: Not reported

Owner/operator name: PRECITEC INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/01/2007
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:

Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Yes

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 03/13/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

7
ENE
< 1/8
0.072 mi.
382 ft.

CASTROL INDUSTRIAL GREAT LAKES
28023 CENTER OAKS CT
WIXOM, MI 48393

RCRA NonGen / NLR
FINDS
ECHO

1000704729
MID985619220

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 12/31/2001

Facility name: CASTROL INDUSTRIAL GREAT LAKES

Facility address: 28023 CENTER OAKS CT

WIXOM, MI 48393

EPA ID: MID985619220

Contact: DAVID SHIPLEY

Contact address: 28023 CENTER OAKS CT

WIXOM, MI 48393

Contact country: US

Contact telephone: 810-344-9111

Contact email: Not reported

EPA Region: 05

Land type: Other land type

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 01/01/2002

Owner/Op end date: Not reported

Owner/operator name: NO ACTIVE O/OP AS NOT GENERATING WASTE

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 01/01/2002

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: No

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASTROL INDUSTRIAL GREAT LAKES (Continued)

1000704729

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/11/1996
Site name: CASTROL INDUSTRIAL GREAT LAKES
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 06/24/1991
Site name: CASTROL INDUSTRIAL GREAT LAKES
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 04/08/1996
Date achieved compliance: 04/30/1996
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/08/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 04/02/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 04/30/1996
Evaluation lead agency: State

FINDS:

Registry ID: 110003661136

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASTROL INDUSTRIAL GREAT LAKES (Continued)

1000704729

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000704729
Registry ID: 110003661136
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110003661136>

**C8
NE
< 1/8
0.089 mi.
470 ft.**

**ESTRAKON INC
28059 CENTER OAKS CT
WIXOM, MI 48393**

**RCRA-CESQG
FINDS
ECHO**

**1001127462
MIR000021139**

Site 2 of 2 in cluster C

**Relative:
Lower**

RCRA-CESQG:

Date form received by agency: 05/01/2015
Facility name: ESTRAKON INC
Facility address: 28059 CENTER OAKS CT
WIXOM, MI 48393
EPA ID: MIR000021139
Contact: JASON R ROGOUSKI
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: 248-624-8880
Telephone ext.: 302
Contact email: JASON.ROGOUSKI@FIREBOLT-GROUP.COM
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: ESTRAKON INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ESTRAKON INC (Continued)

1001127462

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/01/2014
Owner/Op end date: Not reported

Owner/operator name: BRIAN SCLOCKITANO
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/01/2014
Owner/Op end date: Not reported

Owner/operator name: ESTRAKON INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/01/2014
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 01/23/2006
Site name: KAWASAKI ROBOTICS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ESTRAKON INC (Continued)

1001127462

Classification: Not a generator, verified

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 09/17/1998

Site name: KAWASAKI ROBOTICS

Classification: Not a generator, verified

. Waste code: D001

. Waste name: IGNITABLE WASTE

Date form received by agency: 01/21/1997

Site name: KAWASAKI ROBOTICS

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003699542

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1001127462

Registry ID: 110003699542

DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110003699542>

9
WNW
< 1/8
0.113 mi.
595 ft.

WAGON AUTOMOTIVE INC
51000 GRAND RIVER AVE
WIXOM, MI 48393

RCRA NonGen / NLR 1010320357
MIK555188457

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 01/03/2007

Facility name: WAGON AUTOMOTIVE INC

Facility address: 51000 GRAND RIVER AVE
WIXOM, MI 48393

EPA ID: MIK555188457

Contact: DEBRA GONZALES

Contact address: 51000 GRAND RIVER AVE
WIXOM, MI 48393

Contact country: US

Actual:
953 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WAGON AUTOMOTIVE INC (Continued)

1010320357

Contact telephone: 248-255-2468
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: WAGON AUTOMOTIVE INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 11/01/2006
Owner/Op end date: Not reported

Owner/operator name: WAGON AUTOMOTIVE INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/01/2006
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

10
East
< 1/8
0.114 mi.
603 ft.

STANDFAST INDUSTRIES INC
28024 CENTER OAKS CT
WIXOM, MI 48393

RCRA NonGen / NLR

1010320356
MIK554811752

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 12/28/2006

Facility name: STANDFAST INDUSTRIES INC

Facility address: 28024 CENTER OAKS CT

WIXOM, MI 48393

EPA ID: MIK554811752

Contact: JOSEPH O'CONNOR

Contact address: 28024 CENTER OAKS CT

WIXOM, MI 48393

Contact country: US

Contact telephone: 248-380-3223

Contact email: Not reported

EPA Region: 05

Land type: Private

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: STANDFAST INDUSTRIES INC

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 08/01/1994

Owner/Op end date: Not reported

Owner/operator name: STANDFAST INDUSTRIES INC

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 08/01/1994

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: No

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STANDFAST INDUSTRIES INC (Continued)

1010320356

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 03/13/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

**D11
ESE
< 1/8
0.118 mi.
623 ft.**

**MICHIGAN TRACTOR AND MACHINERY CO
28004 CENTER OAKS CT
WIXOM, MI 48393**

RCRA NonGen / NLR

**1007096525
MIK215854688**

Site 1 of 2 in cluster D

**Relative:
Higher**

RCRA NonGen / NLR:

Date form received by agency: 09/19/2006
Facility name: MICHIGAN TRACTOR AND MACHINERY CO
Facility address: 28004 CENTER OAKS CT
WIXOM, MI 48393
EPA ID: MIK215854688
Contact: PETER PRIDMORE
Contact address: 28004 CENTER OAKS CT
WIXOM, MI 48393

Contact country: US
Contact telephone: 248-348-0900
Contact email: Not reported
EPA Region: 05
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: REAL BLOCK LLC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 11/01/1999
Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MICHIGAN TRACTOR AND MACHINERY CO (Continued)

1007096525

Owner/operator name: REAL BLOCK LLC
Owner/operator address: Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/01/1999
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 08/15/2006
Site name: MICHIGAN TRACTOR AND MACHINERY CO
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 10/22/2003
Site name: MICHIGAN TRACTOR AND MACHINERY CO
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 10/03/2003
Date achieved compliance: 11/03/2003
Violation lead agency: State
Enforcement action: INFORMAL ACTIONS
Enforcement action date: 10/06/2003

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MICHIGAN TRACTOR AND MACHINERY CO (Continued)

1007096525

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 10/03/2003
Date achieved compliance: 11/03/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 10/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 10/03/2003
Date achieved compliance: 11/03/2003
Violation lead agency: State
Enforcement action: STATE CONSENT/COMPLIANCE ORDER 3008(A)
Enforcement action date: 11/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9000
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/03/2003
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: State Statute or Regulation
Date achieved compliance: 11/03/2003
Evaluation lead agency: State

D12
ESE
< 1/8
0.118 mi.
623 ft.
MILANO INDUSTRIES, INC.
28004 CENTER OAKS COURT
WIXOM, MI 48393
Site 2 of 2 in cluster D

SWRCY **S111975291**
WDS **N/A**

Relative:
Higher

SWRCY:
SR No: 114
Contact Phone1: 248-449-9750
EMail: Not reported
Website: Not reported
Location Description: 547 miles away
Materials Accepted: Aluminum, Copper, Iron, Stainless Steel
Services: Collector
Collection: Drop off, Pick up
Service Area: Wexford County

Actual:
961 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MILANO INDUSTRIES, INC. (Continued)

S111975291

Notes: Not reported

SWRCY:

SR No 2: 114

Material: Paper - Paperboard

Service: None

Drop Off/Pick Up: None

Minimum Quantity: None

Unit: None

Service Area: None

WDS:

Site Id: MIK215854688

WMD Id: 476311

Site Specific Name: MICHIGAN CAT

Mailing Address: 28004 CENTER OAKS CT

Mailing City/State/Zip: 48393

Mailing County: OAKLAND

13
North
1/8-1/4
0.131 mi.
690 ft.

PPG BUSINESS DEVELOPMENT CTR
28066 OAKLAND OAKS CT
WIXOM, MI 48393

RCRA-CESQG
FINDS
ECHO

1004724955
MIR000020685

Relative:
Lower

RCRA-CESQG:

Date form received by agency: 12/17/1996

Facility name: PPG BUSINESS DEVELOPMENT CTR

Facility address: 28066 OAKLAND OAKS CT
WIXOM, MI 48393

EPA ID: MIR000020685

Contact: STEVE DESHANO

Contact address: 28066 OAKLAND OAKS CT
WIXOM, MI 48393

Contact country: US

Contact telephone: 810-347-3350

Contact email: Not reported

EPA Region: 05

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: PPG INDUSTRIES INC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PPG BUSINESS DEVELOPMENT CTR (Continued)

1004724955

Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Owner/operator name: PPG INDUSTRIES INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003699212

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PPG BUSINESS DEVELOPMENT CTR (Continued)

1004724955

corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004724955
Registry ID: 110003699212
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110003699212>

E14
East
1/8-1/4
0.177 mi.
934 ft.

SUPERABRASIVES INC
28047 GRAND OAKS CT
WIXOM, MI 48393
Site 1 of 2 in cluster E

RCRA-CESQG **1001117786**
MIR000018184

Relative:
Lower

RCRA-CESQG:

Actual:
954 ft.

Date form received by agency: 06/20/2012
Facility name: SUPERABRASIVES INC
Facility address: 28047 GRAND OAKS CT
WIXOM, MI 48393
EPA ID: MIR000018184
Contact: RICHARD T PERRI
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 248-348-7670
Telephone ext.: 1007
Contact email: RPERRI@SUPERABRASIVES.COM
EPA Region: 05
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: CHARLES HALPRIN
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUPERABRASIVES INC (Continued)

1001117786

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1977
Owner/Op end date: Not reported

Owner/operator name: CHARLES HALPRIN
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1977
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 04/23/2012
Site name: SUPERABRASIVES INC
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/27/2011
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/29/2010
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUPERABRASIVES INC (Continued)

1001117786

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/28/2009
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/22/2008
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/20/2007
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/23/2006
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 02/25/2005
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 04/23/2004
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 08/27/2002
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Date form received by agency: 09/18/1996
Site name: SUPERABRASIVES INC
Classification: Small Quantity Generator

. Waste code: D001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUPERABRASIVES INC (Continued)

1001117786

Waste name: IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 03/15/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

15
West
1/8-1/4
0.189 mi.
997 ft.

VENTURA AEROSPACE LLC
51170 GRAND RIVER AVE
WIXOM, MI 48393

RCRA-CESQG

1010785191
MIK551966526

Relative:
Lower

RCRA-CESQG:

Date form received by agency: 02/01/2016
Facility name: VENTURA AEROSPACE LLC
Facility address: 51170 GRAND RIVER AVE
WIXOM, MI 48393
EPA ID: MIK551966526
Contact: JACK AKEY
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: 734-357-1010
Telephone ext.: 115
Contact email: JACK@VENTURAAEROSPACE.NET

Actual:
947 ft.

EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: BRADLEY V BLANCHARD
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VENTURA AEROSPACE LLC (Continued)

1010785191

Owner/Op start date: 02/01/2016
Owner/Op end date: Not reported

Owner/operator name: TIM CRONYYN
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/02/2005
Owner/Op end date: Not reported

Owner/operator name: TIM CRONYYN
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/02/2005
Owner/Op end date: Not reported

Owner/operator name: BRADLEY V BLANCHARD
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 02/01/2016
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VENTURA AEROSPACE LLC (Continued)

1010785191

Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:

Date form received by agency: 11/27/2007
Site name: HEXAGON METROLOGY INC
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

E16
ENE
1/8-1/4
0.198 mi.
1048 ft.

MATHREAD INC
28061 GRAND OAKS CT
WIXOM, MI 48393

RCRA NonGen / NLR

1011489381
MIK627296429

Site 2 of 2 in cluster E

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 05/13/2008
Facility name: MATHREAD INC
Facility address: 28061 GRAND OAKS CT
WIXOM, MI 48393
EPA ID: MIK627296429
Contact: JUDY SPICER
Contact address: 28061 GRAND OAKS CT
WIXOM, MI 48393
Contact country: US
Contact telephone: 248-465-1591
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
951 ft.

Owner/Operator Summary:

Owner/operator name: MATHREAD INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 07/01/2004
Owner/Op end date: Not reported

Owner/operator name: MATHREAD INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MATHREAD INC (Continued)

1011489381

Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/01/2004
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

17
ESE
1/8-1/4
0.217 mi.
1146 ft.

28011 GRAND OAKS COURT
28011 GRAND OAKS COURT
WIXOM, MI 48393

US BROWNFIELDS
FINDS

1016603574
N/A

Relative:
Lower

US BROWNFIELDS:

Actual:
959 ft.

Property Name: 28011 GRAND OAKS COURT
Recipient Name: Oakland County Michigan
Grant Type: Assessment
Property Number: 22-07-401-015
Parcel size: 1.49
Latitude: 42.497080
Longitude: -83.544341
HCM Label: Address Matching-House Number
Map Scale: Not reported
Point of Reference: Entrance Point of a Facility or Station
Highlights: Not reported
Datum: North American Datum of 1983
Acres Property ID: 171941
IC Data Access: Not reported
Start Date: Not reported
Redev Completion Date: Not reported
Completed Date: Not reported
Acres Cleaned Up: Not reported
Cleanup Funding: Not reported
Cleanup Funding Source: Not reported
Assessment Funding: 2400
Assessment Funding Source: US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment Funding: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

28011 GRAND OAKS COURT (Continued)

1016603574

Redev. Funding Source:	Not reported
Redev. Funding Entity Name:	Not reported
Redevelopment Start Date:	Not reported
Assessment Funding Entity:	EPA
Cleanup Funding Entity:	Not reported
Grant Type:	Hazardous
Accomplishment Type:	Phase I Environmental Assessment
Accomplishment Count:	1
Cooperative Agreement Number:	00E01208
Start Date:	03/05/2014 00:00:00
Ownership Entity:	Not reported
Completion Date:	04/04/2014 00:00:00
Current Owner:	Not reported
Did Owner Change:	Not reported
Cleanup Required:	N
Video Available:	N
Photo Available:	Y
Institutional Controls Required:	N
IC Category Proprietary Controls:	Not reported
IC Cat. Info. Devices:	Not reported
IC Cat. Gov. Controls:	Not reported
IC Cat. Enforcement Permit Tools:	Not reported
IC in place date:	Not reported
IC in place:	N
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controlled substance found:	Not reported
Controlled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Y
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

28011 GRAND OAKS COURT (Continued)

1016603574

VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Surface Water:	Not reported
Past use commercial acreage:	1.49
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	1.49
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
Nickel Cleaned Up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Property Description:	Standard and historical sources documents that the property was originally developed prior to 1940 with agricultural fields. The property was utilized for agricultural purposes until between 1961 and 1963, and was vacant land until between 1998 and 1999, when the current building was constructed. The building was occupied by Century Architecture Hardware Incorporated since development and was occupied by Short s Brewery from 2013 to 2014. The current owner indicated that the former operations associated with Century Architecture Hardware consisted of welding door s, wholesale distribution of doors and security systems, and general office activities from 1999 to 2014. The owner also indicated that a portion of the office area was utilized

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

28011 GRAND OAKS COURT (Continued)

1016603574

for merchandising and general office activities by Short s Brewery
from 2013 to 2014.

Below Poverty Number:	122
Below Poverty Percent:	6.1%
Meidan Income:	2006
Meidan Income Number:	378
Meidan Income Percent:	2.0%
Vacant Housing Number:	29
Vacant Housing Percent:	25.5%
Unemployed Number:	73
Unemployed Percent:	10.1%

FINDS:

Registry ID: 110059722536

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)
is an federal online database for Brownfields Grantees to
electronically submit data directly to EPA.

[Click this hyperlink](#) while viewing on your computer to access
additional FINDS: detail in the EDR Site Report.

**18
NE
1/2-1
0.828 mi.
4370 ft.**

**FORD MOTOR CO WIXOM
28801 SOUTH WIXOM RD (OAKLAND ACCESS)
WIXOM, MI 48393**

**AUL S110126748
PART 201 N/A
INVENTORY**

**Relative:
Lower**

AUL:

**Actual:
951 ft.**

Status:	Pending
Site Name:	Ford Motor Co Wixom
Property:	on-site
Land Use Restriction Type:	RC
Program Type:	Part 201
Program Support Assigned User:	Not reported
Program Support Assigned Date:	Not reported
Legal Description Of Property:	Site Address
Based On The Deq Ref #:	11120114004
MDEQ Reference Number:	RC-RRD-201-14-004
Property Or Description Restricted Area:	Not reported
Lead Division:	RD
File Name Of Hyperlinked Legal Doc:	Not reported
Mapped Polygons Area In Acres:	Not reported
Mapped Polygons Area In Square Miles:	Not reported
Date Data Entry Started:	Not reported
Date Data Entry Finished:	Not reported
Individual Or Staff Assoc With The Mapping:	Not reported
Program Used To Map Restricted Features:	Not reported
Date Legal Paperwork Stamped/Filed/Register Of Deeds:	Not reported
Commercial I Land Use Restriction:	0
Commercial Ii Land Use Restriction:	0
Commercial Iii Land Use Restriction:	0
Commercial Iv Land Use Restriction:	0
Industrial Land Use Restriction:	0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD MOTOR CO WIXOM (Continued)

S110126748

Residential Land Use Restriction: 0
Recreational Land Use Restriction: 0
Multiple Land-Use Restrictions: 0
Site Specific Restrictions: 0
Groundwater Consumption Restrictions: 0
Groundwater Contact Restrictions: 0
Special Well Construction Requirements: 0
Special Building Restrictions: 0
Excavation And Soil Movement Restrictions: 0
Soil Movement Requirements: 0
There Is A Restriction On All Construction: 0
Monitoring Well Protected, No Tampering Or Removal: 0
There Is An Exposure Barrier In Place: 0
There Is A Health And Safety Plan: 0
There Is A Permanent Marker On The Site: 0
Map Comments: Not reported
Comment: Januaury 23, 2014 consultant requested DEQ reference #.

Status: Pending
Site Name: Ford Motor Co Wixom
Property: On-Site
Land Use Restriction Type: RC
Program Type: Part 201
Program Support Assigned User: Not reported
Program Support Assigned Date: Not reported
Legal Description Of Property: Site Address
Based On The Deq Ref #: 11120115012
MDEQ Reference Number: RC-RRD-201-15-012
Property Or Description Restricted Area: Not reported
Lead Division: RRD
File Name Of Hyperlinked Legal Doc: Not reported
Mapped Polygons Area In Acres: Not reported
Mapped Polygons Area In Square Miles: Not reported
Date Data Entry Started: Not reported
Date Data Entry Finished: Not reported
Individual Or Staff Assoc With The Mapping: Not reported
Program Used To Map Restricted Features: Not reported
Date Legal Paperwork Stamped/Filed/Register Of Deeds: Not reported
Commercial I Land Use Restriction: 0
Commercial Ii Land Use Restriction: 0
Commercial Iii Land Use Restriction: 0
Commercial Iv Land Use Restriction: 0
Industrial Land Use Restriction: 0
Residential Land Use Restriction: 0
Recreational Land Use Restriction: 0
Multiple Land-Use Restrictions: 0
Site Specific Restrictions: 0
Groundwater Consumption Restrictions: 0
Groundwater Contact Restrictions: 0
Special Well Construction Requirements: 0
Special Building Restrictions: 0
Excavation And Soil Movement Restrictions: 0
Soil Movement Requirements: 0
There Is A Restriction On All Construction: 0
Monitoring Well Protected, No Tampering Or Removal: 0
There Is An Exposure Barrier In Place: 0
There Is A Health And Safety Plan: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD MOTOR CO WIXOM (Continued)

S110126748

There Is A Permanent Marker On The Site: 0
Map Comments: Not reported
Comment: 20150209 - Reference number was requested by Kristen T. Aspinall of
CRA - Nick Ekel

PART 201:

Facility ID: 63000022
Facility Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring)
Source: Not reported
SAM Score: 29
SAM Score Date: 09/19/1991
Township: 01N
Range: 08E
Section: 7
Quarter: Not reported
Quarter/Quarter: Not reported
Pollutants: Cd; Pb

INVENTORY:

Bea Number: Not reported
Township: Wixom
District: Southeast MI
Data Source: Part 201
Latitude: 42.50444
Longitude: -83.5394

**19
NE
1/2-1
0.906 mi.
4785 ft.**

**PAVEMENT SEALANTS
29420 WIXOM ROAD
WIXOM, MI 48096**

**DEL PART 201 S105965683
N/A**

**Relative:
Lower**

DEL_PART201:
Facility ID: 63000132
Status: Deleted - available documentation does not support listing

**Actual:
950 ft.**

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
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NO SITES FOUND

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/08/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 11/03/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 11/03/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 11/03/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 10/06/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/11/2017	Source: EPA
Date Data Arrived at EDR: 07/21/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 11/03/2017
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/11/2017	Source: EPA
Date Data Arrived at EDR: 07/28/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 11/03/2017
Number of Days to Update: 70	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017	Source: EPA
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 312-886-6186
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 312-886-6186
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 312-886-6186
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 312-886-6186
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017	Source: Department of the Navy
Date Data Arrived at EDR: 06/13/2017	Telephone: 843-820-7326
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 08/10/2017
Number of Days to Update: 94	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/30/2017	Telephone: 703-603-0695
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/30/2017	Telephone: 703-603-0695
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017

Date Data Arrived at EDR: 09/21/2017

Date Made Active in Reports: 10/13/2017

Number of Days to Update: 22

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 01/08/2018

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Date of Government Version: N/A

Date Data Arrived at EDR: 10/31/2013

Date Made Active in Reports: 11/20/2013

Number of Days to Update: 20

Source: Dept of Environmental Quality

Telephone: 517-284-5103

Last EDR Contact: 10/20/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: No Update Planned

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 06/28/2017

Date Data Arrived at EDR: 06/29/2017

Date Made Active in Reports: 09/26/2017

Number of Days to Update: 89

Source: Dept of Environmental Quality

Telephone: 517-335-4035

Last EDR Contact: 10/27/2017

Next Scheduled EDR Contact: 01/08/2018

Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 06/30/2017

Date Data Arrived at EDR: 07/18/2017

Date Made Active in Reports: 07/19/2017

Number of Days to Update: 1

Source: Dept of Environmental Quality

Telephone: 517-373-9837

Last EDR Contact: 10/05/2017

Next Scheduled EDR Contact: 11/27/2017

Data Release Frequency: Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017

Date Data Arrived at EDR: 07/27/2017

Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: EPA Region 8

Telephone: 303-312-6271

Last EDR Contact: 10/27/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

State and tribal registered storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017	Source: FEMA
Date Data Arrived at EDR: 05/30/2017	Telephone: 202-646-5797
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/13/2017
Number of Days to Update: 136	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Varies

UST: Underground Storage Tank Facility List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 10/21/2016	Source: Department of Licensing & Regulatory Affairs
Date Data Arrived at EDR: 02/16/2017	Telephone: 517-373-1820
Date Made Active in Reports: 05/03/2017	Last EDR Contact: 08/29/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: Annually

UST 2: Underground Storage Tank Listing

A listing of underground storage tank site locations that have unknown owner information.

Date of Government Version: 10/18/2016	Source: Department of Licensing & Regulatory Affairs
Date Data Arrived at EDR: 10/21/2016	Telephone: 517-373-1820
Date Made Active in Reports: 01/30/2017	Last EDR Contact: 10/11/2017
Number of Days to Update: 101	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Annually

AST: Aboveground Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 08/14/2017	Source: Department of Licensing & Regulatory Affairs
Date Data Arrived at EDR: 08/15/2017	Telephone: 517-373-1820
Date Made Active in Reports: 10/05/2017	Last EDR Contact: 08/11/2017
Number of Days to Update: 51	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: No Update Planned

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017	Source: EPA, Region 1
Date Data Arrived at EDR: 07/27/2017	Telephone: 617-918-1313
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017	Source: EPA Region 5
Date Data Arrived at EDR: 07/27/2017	Telephone: 312-886-6136
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016	Source: EPA Region 6
Date Data Arrived at EDR: 01/26/2017	Telephone: 214-665-7591
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017	Source: EPA Region 7
Date Data Arrived at EDR: 07/27/2017	Telephone: 913-551-7003
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017	Source: EPA Region 8
Date Data Arrived at EDR: 07/27/2017	Telephone: 303-312-6137
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017	Source: EPA Region 9
Date Data Arrived at EDR: 07/27/2017	Telephone: 415-972-3368
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017	Source: EPA Region 10
Date Data Arrived at EDR: 07/27/2017	Telephone: 206-553-2857
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/27/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AUL: Engineering and Institutional Controls

A listing of sites with institutional and/or engineering controls in place.

Date of Government Version: 08/25/2017

Date Data Arrived at EDR: 08/25/2017

Date Made Active in Reports: 09/26/2017

Number of Days to Update: 32

Source: Dept of Environmental Quality

Telephone: 517-373-4828

Last EDR Contact: 08/24/2017

Next Scheduled EDR Contact: 12/11/2017

Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015

Date Data Arrived at EDR: 09/29/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1

Telephone: 617-918-1102

Last EDR Contact: 09/25/2017

Next Scheduled EDR Contact: 01/08/2018

Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Date Data Arrived at EDR: 04/22/2008

Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7

Telephone: 913-551-7365

Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields and USTfield Site Database

All state funded Part 201 and 213 sites, as well as LUST sites that have been redeveloped by private entities using the BEA process. Be aware that this is not a list of all of the potential brownfield sites in Michigan.

Date of Government Version: 01/15/2016

Date Data Arrived at EDR: 02/02/2016

Date Made Active in Reports: 04/04/2016

Number of Days to Update: 62

Source: Dept of Environmental Quality

Telephone: 517-373-4805

Last EDR Contact: 10/27/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: Varies

BROWNFIELDS 2: Brownfields Building and Land Site Locations

A listing of brownfield building and land site locations. The listing is a collaborative effort of Michigan Economic Development Corporation, Michigan Economic Developers Association, Detroit Edison, Detroit Area Commercial Board of Realtors

Date of Government Version: 04/09/2007

Date Data Arrived at EDR: 04/10/2007

Date Made Active in Reports: 05/01/2007

Number of Days to Update: 21

Source: Economic Development Corporation

Telephone: 888-522-0103

Last EDR Contact: 08/24/2017

Next Scheduled EDR Contact: 12/11/2017

Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/20/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF: Inactive Solid Waste Facilities

The database contains historical information and is no longer updated.

Date of Government Version: 03/01/1997
Date Data Arrived at EDR: 02/28/2003
Date Made Active in Reports: 03/06/2003
Number of Days to Update: 6

Source: Dept of Environmental Quality
Telephone: 517-335-4034
Last EDR Contact: 02/28/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities

A listing of recycling center locations.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 2

Source: Dept of Environmental Quality
Telephone: 517-241-5719
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/20/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/03/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017

Date Data Arrived at EDR: 09/06/2017

Date Made Active in Reports: 10/06/2017

Number of Days to Update: 30

Source: Drug Enforcement Administration

Telephone: 202-307-1000

Last EDR Contact: 08/30/2017

Next Scheduled EDR Contact: 12/11/2017

Data Release Frequency: No Update Planned

PART 201: Part 201 Site List

A Part 201 Listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 List does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact.

Date of Government Version: 10/01/2013

Date Data Arrived at EDR: 10/03/2014

Date Made Active in Reports: 10/03/2014

Number of Days to Update: 0

Source: Department of Environmental Quality

Telephone: 517-284-5103

Last EDR Contact: 10/20/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: No Update Planned

INVENTORY: Inventory of Facilities

The Inventory of Facilities has three data sources: Facilities under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) identified through state funded or private party response activities (Projects); Facilities under Part 213, Leaking Underground Storage Tanks of the NREPA; and Facilities identified through submittals of Baseline Environmental Assessments (BEA) submitted pursuant to Part 201 or Part 213 of the NREPA. The Part 201 Projects Inventory does not include all of the facilities that are subject to regulation under Part 201 because owners are not required to inform the Department of Environmental Quality (DEQ) about the facilities and can pursue cleanup independently. Facilities that are not known to DEQ are not on the Inventory, nor are locations with releases that resulted in low environmental impact. Part 213 facilities listed here may have more than one release; a list of releases for which corrective actions have been completed and list of releases for which corrective action has not been completed is located on the Leaking Underground Storage Tanks Site Search webpage. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

Date of Government Version: 07/25/2017

Date Data Arrived at EDR: 07/26/2017

Date Made Active in Reports: 09/27/2017

Number of Days to Update: 63

Source: Department of Environmental Quality

Telephone: 517-284-5136

Last EDR Contact: 10/25/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: Quarterly

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab locations.

Date of Government Version: 12/31/2016

Date Data Arrived at EDR: 02/17/2017

Date Made Active in Reports: 04/18/2017

Number of Days to Update: 60

Source: Department of Community Health

Telephone: 517-373-3740

Last EDR Contact: 10/23/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEL PART 201: Delisted List of Contaminated Sites

A deleted site has been removed from the Part 201 List because information known to the DEQ at the time of the evaluation does not support inclusion on the Part 201 List. This designation is often applied to sites where changes in cleanup criteria resulted in a determination that the site no longer exceeds any applicable cleanup criterion. A delisted site has been removed from the Part 201 List because response actions have reduced the levels of contaminants to concentrations which meet or are below the criteria for unrestricted residential use.

Date of Government Version: 08/01/2013	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/01/2013	Telephone: 517-373-9541
Date Made Active in Reports: 09/11/2013	Last EDR Contact: 10/20/2017
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2017	Telephone: 202-307-1000
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 30	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Quarterly

Local Land Records

LIENS: Lien List

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC * 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition

Date of Government Version: 07/25/2017	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/08/2017	Telephone: 517-241-7603
Date Made Active in Reports: 09/26/2017	Last EDR Contact: 10/20/2017
Number of Days to Update: 49	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/11/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2017	Telephone: 202-564-6023
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 11/03/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/21/2017	Telephone: 202-366-4555
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 09/21/2017
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PEAS: Pollution Emergency Alerting System

Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents, pipeline breaks, and release of reportable quantities of hazardous substances.

Date of Government Version: 09/11/2017	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 09/19/2017	Telephone: 517-373-8427
Date Made Active in Reports: 09/27/2017	Last EDR Contact: 10/23/2017
Number of Days to Update: 8	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 312-886-6186
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 08/25/2017
Number of Days to Update: 97	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/13/2017
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/11/2017
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 121

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/22/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/23/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/27/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 8

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/03/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/03/2017
Number of Days to Update: 3	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: 202-566-0500
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/13/2017
Number of Days to Update: 126	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 10/11/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/16/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 10/03/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/08/2017
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/26/2017
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/05/2018
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/05/2017	Telephone: 202-343-9775
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 8	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/02/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/03/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 24

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 9

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 133

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 261

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/06/2017	Telephone: 202-564-2280
Date Made Active in Reports: 10/20/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2017	Source: EPA
Date Data Arrived at EDR: 08/17/2017	Telephone: 800-385-6164
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 08/17/2017
Number of Days to Update: 29	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

AIRS: Permit and Emissions Inventory Data

Permit and emissions inventory data.

Date of Government Version: 09/28/2017	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 10/02/2017	Telephone: 517-373-7074
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 09/18/2017
Number of Days to Update: 11	Next Scheduled EDR Contact: 01/01/2018
	Data Release Frequency: Annually

ASBESTOS: Asbestos Notification Listing

Asbestos

Date of Government Version: 07/31/2017	Source: Department of Licensing & Regulatory Affairs
Date Data Arrived at EDR: 08/10/2017	Telephone: 517-284-7699
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 11/01/2017
Number of Days to Update: 64	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Quarterly

BEA: Baseline Environmental Assessment Database

A BEA is a document that new or prospective property owners/operations disclose to the DEQ identifying the property as a facility pursuant to Part 201 and Part 213. The Inventory of BEA Facilities overlaps in part with the Part 201 Projects facilities and Part 213 facilities. There may be more than one BEA for each facility.

Date of Government Version: 08/21/2013	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 08/23/2013	Telephone: 517-373-9541
Date Made Active in Reports: 09/12/2013	Last EDR Contact: 08/11/2017
Number of Days to Update: 20	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: No Update Planned

COAL ASH: Coal Ash Disposal Sites

Coal fired power plants in Southeast Michigan that have coal ash handling on site.

Date of Government Version: 10/20/2016	Source: Dept of Environmental Quality
Date Data Arrived at EDR: 02/02/2017	Telephone: 586-753-3754
Date Made Active in Reports: 04/20/2017	Last EDR Contact: 09/28/2017
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Establishments

A listing of drycleaning facilities in Michigan.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/20/2017
Date Data Arrived at EDR: 10/20/2017
Date Made Active in Reports: 10/24/2017
Number of Days to Update: 4

Source: Dept of Environmental Quality
Telephone: 517-335-4586
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Quarterly

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 10/04/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 7

Source: Dept of Environmental Quality
Telephone: 517-335-6610
Last EDR Contact: 09/28/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Semi-Annually

FINANCIAL ASSURANCE 3: Financial Assurance Information Listing

Financial assurance information for underground storage tank facilities.

Date of Government Version: 08/24/2017
Date Data Arrived at EDR: 08/24/2017
Date Made Active in Reports: 10/27/2017
Number of Days to Update: 64

Source: Department of Licensing & Regulatory Affairs
Telephone: 517-335-7279
Last EDR Contact: 09/28/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 01/05/2011
Date Data Arrived at EDR: 01/07/2011
Date Made Active in Reports: 02/14/2011
Number of Days to Update: 38

Source: Dept of Environmental Quality
Telephone: 517-335-4034
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

LEAD CERT: Lead Safe Housing Registry

A listing of Michigan properties included in the Lead Safe Housing Registry.

Date of Government Version: 09/15/2015
Date Data Arrived at EDR: 09/16/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 14

Source: Department of Community Health
Telephone: 517-335-9699
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

NPDES: List of Active NPDES Permits

General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm Water permits.

Date of Government Version: 10/27/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 04/20/2017
Number of Days to Update: 104

Source: Dept of Environmental Quality
Telephone: 517-241-1300
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

UIC: Underground Injection Wells Database

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/08/2016
Date Made Active in Reports: 01/30/2017
Number of Days to Update: 83

Source: Dept of Environmental Quality
Telephone: 517-241-1515
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WDS: Waste Data System

The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs.

Date of Government Version: 02/01/2017

Date Data Arrived at EDR: 02/03/2017

Date Made Active in Reports: 04/20/2017

Number of Days to Update: 76

Source: Dept of Environmental Quality

Telephone: 517-284-6562

Last EDR Contact: 08/21/2017

Next Scheduled EDR Contact: 12/04/2017

Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc.

Telephone: N/A

Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA PART 201: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/24/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 176	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/13/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 196	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Michigan.

Date of Government Version: N/A	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/24/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 176	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 08/18/2017
Number of Days to Update: 45	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/11/2017	Telephone: N/A
Date Made Active in Reports: 07/27/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 107	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/12/2017
Number of Days to Update: 70

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/11/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Centers, Group & Family Homes

Source: Bureau of REgulatory Services

Telephone: 517-373-8300

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Department of Natural Resources

Telephone: 517-241-2254

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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Appendix E

PM PROFESSIONAL RESUMES

CHRISTOPHER JOHNSTONE

STAFF CONSULTANT

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AREAS OF EXPERTISE

- Staff researcher for Phase I Environmental Site Assessments (ESAs)
- Data collection and evaluation, site investigation, and preparation of Phase I & II ESA and Transaction Screen reports
- Experience in implementation and completion of various site assessment standards and professional protocol and commercial lending requirements (ASTM E-1527)



EDUCATION

- Seattle University Bachelor of Arts in Environmental Studies: Urban Development

KEVIN M. KRUSZEWSKI, P.G., Q.C.

SENIOR ENVIRONMENTAL RISK MANAGER

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Kevin Kruszewski is Senior Environmental Risk Manager at PM Environmental, Inc. and has served clients in over 48 states since 1988. He specializes in Phase I and Phase II Environmental Site Assessments (ESAs), Baseline Environmental Assessments (BEAs), and due care plans, Underground Storage Tank (UST) closures, and lender risk management. Kruszewski has been involved in thousands of transactions, including typical Environmental Due Diligence for purchase and refinance transactions, and participations and foreclosures. His recent focus includes serving financial clients based in the Midwest with investment interests across the country.

AREAS OF EXPERTISE

- Real estate portfolio analysis for evaluation of environmental risk associated with single and multi property transactions for the lending industry
- Collateral and exposure analysis for over 3,000 real estate transactions, including single and multi commercial, industrial, and multi state properties
- Management of environmental due diligence associates with foreclosed properties
- Peer/senior technical review for Baseline Environmental Assessment (BEA) Projects
- Peer/senior technical review for due care analysis for BEAs in accordance with the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, Parts 201 and 213
- Peer/senior technical review of Phase I, Phase II, Phase III ESA projects
- Peer/senior technical review for Leaking Underground Storage Tank (LUST) projects, including risk evaluation for the lending industry
- Technical review of land use based corrective action plans
- Experience with local, state, and federal regulatory acts
- Technical review of feasibility studies for the remediation of soil and groundwater
- Technical review of generic and site-specific risk assessments
- On-site management of the containment and recovery of dense non-aqueous phase liquids (DNAPLs)



EDUCATION

- Michigan State University B.S. Geology

REGISTRATION

- Professional Geologist—
State of Indiana
- Certified UST Professional—
State of Michigan

CERTIFICATIONS

- OSHA 1910.120 Hazardous Waste Training
- American Red Cross Standard First Aid and Adult CPR
- Meets the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312

PROFESSIONAL ACTIVITIES

- Michigan Association of Environmental Professionals
- Environmental Bankers Association

KRISTIN GABLE

REGIONAL MANAGER—DUE DILIGENCE GROUP

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Kristin Gable is the Regional Manager of Due Diligence at PM Environmental, Inc. and has served clients in over 13 States. She specializes in Environmental Due Diligence including Phase I Environmental Site Assessments and customized environmental assessments to support all forms of real estate transactions. Gable has successfully managed due diligence services for several multi-state portfolios including a multi-property portfolio of asphalt-sealant manufacturing facilities. She has managed thousands of environmental due diligence projects, and her recent focus includes serving industrial and petroleum industry clients.

AREAS OF EXPERTISE

- Data collection, site investigation, and preparation of Phase I ESA and Transaction Screen projects
- Experience in implementation and completion of various site assessment standards and professional protocol and commercial lending requirements (ASTM E-1527, ASTM E-1528)
- Coordination and management of regional due diligence group
- Peer technical review of Phase I ESA projects using ASTM Standard 1527



EDUCATION

- Oakland University B.S. Environmental Science—Specialization in Environmental and Resource Management

CERTIFICATIONS

- Certified Asbestos Building Inspector Accreditation #A39706
- Meets the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312

Appendix F

COMMON ACRONYMS AND TERMINOLOGY USED IN THE COURSE OF THIS PHASE I ESA

The following is a list of common acronyms:

All Appropriate Inquiry	AAI
Asbestos Containing Materials	ACM
Aboveground Storage Tank	AST
American Society for Testing Materials	ASTM
Approximate Minimum Search Distance	ASMD
Comprehensive Environmental Response, Compensation and Liability Act	CERCLA
Environmental Data Resources	EDR
Environmental Site Assessment	ESA
Federal Emergency Response Notification System	ERNS
Large Quantity Generator	LQG
Leaking Underground Storage Tank	LUST
National Priority List	NPL
No Further Remedial Action Planned	NFRAP
PM Environmental, Inc.	PME
Polychlorinated Biphenyls	PCBs
Resource Conservation and Recovery Act	RCRA
Small Quantity Generator	SQG
Treatment Storage and Disposal Facility	TSD
Underground Storage Tank	UST
United States Environmental Protection Agency	USEPA

TERMINOLOGY

The following provides definitions and descriptions of certain terms that may be used in this report. Several terms are defined by ASTM Standard Practice E 1527. The Standard Practice should be referenced for further detail (such as the precise wording), related definitions, or additional explanation regarding the meaning of terms.

Asbestos containing material (ACM): Any material found to contain greater than 1% asbestos using an analytical method that is approved by the USEPA for asbestos analysis.

De minimis conditions: Conditions that generally do not present a material risk or harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Friable material: Defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) as a material that can be pulverized or reduced to dust using hand pressure only.

General risk of enforcement action: The likelihood that an environmental condition would be subject to enforcement action if brought to the attention of appropriate

governmental agencies. If the circumstances suggest an enforcement action would be more likely than not, then the condition is considered a general risk of enforcement action.

Historical recognized environmental condition (HREC): Environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently. The final decision rests with the environmental professional and will be influenced by the current impact of the historical recognized environmental condition on the subject property. If a past release of any hazardous substances or petroleum products has occurred in connection with the subject property, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered a historical recognized environmental condition.

Non-friable material: Defined by National Emission Standards for Hazardous Air Pollutants (NESHAP) as a material that cannot be pulverized or reduced to dust using hand pressure only. According to NESHAP, non-friable building materials include those in Category I (packings, gaskets, resilient floor coverings/adhesives, and asphalt roofing materials) and those in Category II (all other materials).

Recognized environmental condition (REC): The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the subject property or into the ground, ground water, or surface water of the subject property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Subject property: The area that is the focus of a Phase I Environmental Site Assessment. The boundaries are not necessarily consistent with recorded legal descriptions of real estate, and are defined by the User.

Suspect ACM of concern: Defined as “(I) all friable suspect ACMs (II) any non-friable suspect ACMs expected to be disturbed by renovation or demolition activities planned for the subject property.”

General Scope of Services for Phase I ESA

The purpose of the Phase I ESA is to gather sufficient information to develop an independent professional opinion about the environmental condition of the subject property. The ESA will be conducted in an attempt to satisfy the ASTM Standard (E-1527-13) and the U.S. EPA Standards and Practices for All Appropriate Inquiry as defined in the Small Business Liability Relief and Brownfields Revitalization Act. The Phase I ESA will encompass the following scope of work:

Records Review

- Federal and State database search for sites within the ASTM approximate minimum search distances.
- Review of one or more additional state environmental record sources (e.g., fire department, health department, published local or state site contamination lists, etc.). PM is typically exhaustive in inquiry with these resources.
- Utilization of as many of the ASTM standard historical sources as necessary and as reasonably ascertainable and likely to be useful to document all obvious uses of the subject property from the present, back to the subject property's first developed usage (agricultural or the placement of fill) or 1940, whichever is earlier (e.g., aerial photographs, fire insurance maps, topographic maps, street directories, building record and other sources including knowledgeable interviewees). PM is typically exhaustive in usage of these resources to document subject property historical usages. **Chain of title is not typically consulted by PM unless all other standard and historical sources cannot adequately document subject property usages or if required by a lender. A separate fee to the lump sum quoted will be assessed for obtainment of chain of title.**
- A records review in accordance with the requirements for a Vapor Intrusion Assessment per ASTM E-2600-08 is not included in this scope of work.

Site Reconnaissance

- The objective of the site reconnaissance is to obtain information regarding the likelihood of recognized environmental conditions in connection with the subject property.
- The exterior of the subject property and any structures, as well as, pathways, roads, etc., will be visually and physically observed.
- The interior of the structures on the subject property will be visually and physically observed. This includes all common areas, maintenance and repair rooms, boiler rooms and representative number of occupant spaces. Observations under floors, above ceilings or behind walls are not required unless specified by requirements other than the ASTM standard.
- PM will evaluate non-ASTM scope issues with a visual inspection, and comment on asbestos containing building materials, lead based paint, and water intrusion associated with mold. Sampling is not included within this scope of work, but can be completed under a separate proposal.
- Current and past uses of the subject property and adjoining properties, and general uses of surrounding properties, to the extent visually and physically observed will be recorded. Emphasis is placed on subject property or adjoining property usages involving use, treatment, storage, disposal or generation of hazardous substances or petroleum products. These observations may include process details on raw material and waste management practices.
- General description of structures and improvements on the subject property (number and age of buildings, ancillary structures, utilities, storage tanks, hazardous substance and petroleum product usage, general chemical or raw material usage, heating and cooling, stains, solid waste, waste water, etc.).

Interviews with Owners and Occupants

- Interviews with owners, occupants, key site manager and user (person on behalf Phase I ESA conducted), typically with regard to information about current and historical uses, general site setting information, site specific documents, litigation, administrative orders, notices of violations with regard to environmental issues, etc.

Interviews with Local Government Officials

- A reasonable attempt will be made to interview at least one staff member of any of the following: the local fire department, the local agency or state agency having jurisdiction over environmental matters in the area in which the subject property is located, and/or the local health department. PM is typically exhaustive in its inquiry of these sources, unless professional experience has indicated the resource is not beneficial.

Evaluation and Report Preparation

- The report of the Phase I ESA findings will generally follow the ASTM format unless otherwise requested by the client or as outlined in any applicable lender requirements. The report will include documentation of sources, methodology, limitations, and credentials. *Liability/risk evaluations, recommendations for Phase II ESA testing and remediation techniques are not provided within the scope of an ASTM performed assessment.* Phase I ESA reports are kept in the strictest client confidence and are issued directly to the client. Issuance or reliance on the Phase I ESA report for purposes of making loan decisions by a private lender may be included in the Phase I ESA report if specified by the client.

USER'S CONTINUING OBLIGATIONS UNDER CERCLA

Conducting a Phase I ESA alone does not provide a landowner with protection against CERCLA liability. Landowners who want to maintain a bona Fide Prospective Purchaser, an Innocent Landowner, or a Contiguous Property Owner Defense must also comply with other pre-acquisition and post-acquisition requirements in the CERCLA regulations and AAI standards. The responsibilities for each defense are summarized below.

Bona Fide Prospective Purchaser Responsibilities

The Bona Fide Prospective Purchaser defense is intended for individuals or entities purchasing a property known to be contaminated. To obtain and maintain the defense, the individual or entity seeking the defense must also satisfy the following requirements (AAI, Section II D.1.):

- Have acquired a property after all disposal activities involving hazardous substances ceased at the property;
- Provide all legally required notices with respect to the discovery or release of any hazardous substances at the property;
- Exercise appropriate care by taking reasonable steps to stop continuing releases, prevent any threatened future releases, and prevent or limit human, environmental, or natural resources exposure to any previously released hazardous substance;
- Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restorations;
- Comply with land use restrictions established or relied on in connection with a response action;
- Not impede the effectiveness or integrity of any institutional controls;
- Comply with any CERCLA request for information or administrative subpoena; and
- Not be potentially liable, or affiliated with any other person who is potentially liable for response costs for addressing releases at the property.

Innocent Landowner Responsibilities

The Innocent Landowner Defense protects individuals or entities (ultimately the "property owner") purchasing a property that is not known to be contaminated. The property owner must also satisfy the following requirements to obtain and maintain the defense (AAI, Section II D.3 and CERCLA Section 107(b)(3)):

- Have no reason to know that any hazardous substance which is the subject of a release of threatened release was disposed of on, in, or at the facility;
- Provide full cooperation, assistance and access to persons authorized to conduct response actions at the property;
- Comply with any land use restrictions and not impeding the effectiveness or integrity of any institutional controls;

- Take reasonable steps to stop continuing releases, prevent any threatened release, and prevent or limit human, environmental, or natural resource exposure to any hazardous substances released on or from the landowner's property;
- Demonstrate that the act or omission that caused the release or threat of release of hazardous substances and the resulting damages were caused by the third party with whom the person does not have employment, agency, or contractual relationship;
- Exercise due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances;
- Take precautions against foreseeable acts or omissions of a third party and the consequences that could result from such acts or omissions.

Contiguous Property Owner Defense

The Contiguous Property Owner Defense protects individuals or entities purchasing a property that is not known to be contaminated, but could be contaminated by migration from a contiguous property owned by someone else. To qualify as a contiguous property owner, a landowner must have no knowledge of contamination prior to acquisition, or reason to know of contamination at the time of acquisition, have conducted AAI, and meet all of the criteria set forth in AAI Section II.D.2 and CERCLA Section 107(q)(1)(A), which include:

- Not cause, contribute, or consent to the release or threatened release;
- Not be potentially liable nor affiliated with any other person potentially liable for response costs at the property;
- Take reasonable steps to stop continuing releases, prevent any threatened release, and prevent or limit human, environmental, or natural resource exposure to any hazardous substances released on or from the landowner's property;
- Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restorations;
- Comply with land use restrictions established or relied on in connection with a response action;
- Not impede the effectiveness or integrity of any institutional controls;
- Comply with any CERCLA request for information or administrative subpoena;
- Provide all legally required notices with respect to discovery or release of any hazardous substances at the property.

Persons who know, or have reason to know, that the property is or could be contaminated at the time of acquisition of a property cannot qualify for the liability protection as a contiguous property owner, but may be entitled to Bona Fide Prospective Purchaser status.